

Cover Sheet: Request 10860

PHA5784C Patient Care 4: Gastrointestinal & Renal Disorders

Info

Process	Course New Ugrad/Pro
Status	Pending
Submitter	Beck,Diane Elizabeth beck@cop.ufl.edu
Created	3/15/2016 1:25:43 AM
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Description	Fourth of an eight course sequence that prepares the student to provide patient-centered care by serving as a collaborative interprofessional team-member who is an authority on pharmacotherapy. This course focuses on providing patient-centered care to patients who have a gastrointestinal or renal disorders.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	COP - Interdisciplinary Studies	Whalen, Karen		3/15/2016
No document changes					
College	Approved	COP - College of Pharmacy	Beck, Diane Elizabeth		3/16/2016
No document changes					
University Curriculum Committee	Comment	PV - University Curriculum Committee (UCC)	Case, Brandon	Added to the April agenda.	3/22/2016
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			3/22/2016
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Course|New for request 10860

Info

Request: PHA5784C Patient Care 4: Gastrointestinal & Renal Disorders

Submitter: Beck,Diane Elizabeth beck@cop.ufl.edu

Created: 3/15/2016 1:37:59 AM

Form version: 3

Responses

Recommended PrefixPHA

Course Level 5

Number 784

Lab Code C

Course TitlePatient Care 4: Gastrointestinal & Renal Disorders

Transcript TitlePt Care 4: GI & Renal

Effective Term Spring

Effective Year2017

Rotating Topic?No

Amount of Credit6

Repeatable Credit?No

S/U Only?No

Contact Type Regularly Scheduled

Degree TypeProfessional

Weekly Contact Hours 15

Category of Instruction Intermediate

Delivery Method(s)On-Campus

Off-Campus

Online

Course Description Fourth of an eight course sequence that prepares the student to provide patient-centered care by serving as a collaborative interprofessional team-member who is an authority on pharmacotherapy. This course focuses on providing patient-centered care to patients who have a gastrointestinal or renal disorders.

Prerequisites Completion of all Year 1 Pharm.D. program coursework including milestones

& PHA 5781 Patient Care 1*

& PHA 5755 Principles of Medical Microbiology, Immunology, and Virology

& PHA 5782 Patient Care 2: Infectious Diseases and Oncology*

& PHA 5783C Patient Care 3: Cardiovascular and Pulmonary Diseases*

*These pre-requisites may be waived with the consent of the Academic Performance Committee

Co-requisites PHA 5163L Professional Practice Skills Lab IV

Rationale and Placement in Curriculum This course requires the foundational principles taught in the courses during year 1 and fall semester of year 2.

Patient cases and assessments will require the student to apply concepts learned in the prior Patient Care courses.

The course prepares the student for the third year courses and the fourth year APPEs.

Course Objectives

1. Upon completion of this course, the student will be able to provide patient-

centered care for patients with one or more of the following diseases, disorders or pharmacotherapy needs:

- a. Peptic ulcer disease (including self-care)
- b. Gastro-esophageal reflux disease (GERD) (including self-care)
- c. Inflammatory Bowel Disease
- d. Nausea and vomiting (including self-care)
- e. Diarrhea (including self-care)
- f. Constipation (including self-care)
- g. Irritable Bowel Syndrome (including self-care)
- h. Diverticulitis
- i. Hepatitis
- j. Portal Hypertension and cirrhosis
- k. Nutrition
- l. Weight Management
- m. Fluid and electrolyte disorders
- n. Acid-base Balance
- o. Drug-induced kidney disease
- p. Acute Renal Failure
- q. Chronic Kidney Disease
- r. Hemodialysis and peritoneal dialysis
- s. Complicated urinary tract infections (cUTIs)
- t. Pyelonephritis
- u. Intra-abdominal Infections
- v. Clostridium difficile infections
- w. Colorectal Cancer

2. Specifically, given a case of a patient with one or more of the above disorders/pharmacotherapy needs:

a. Integrate knowledge and use clinical reasoning skills in accomplishing the following steps when managing a patient with the disease state:

i. Collect: Gather subjective and objective information about the patient in order to understand the relevant medical and medication history and clinical status of the patient.

1. Subjective and objective information is collected through patient interview, medical record review, pharmacy profile review, and communication with other members of the health care team.

2. A Holistic View is initiated during collection in order to consider physiological, psychological, and sociological variables of the patient and this view is maintained throughout the patient care process.

ii. Assess: Assess the information collected and analyze the clinical effects of the patient's therapy in the context of the patient's overall health goals in order to identify and prioritize problems and achieve optimal care.

1. Understand, explain, and assess a patient's health status.

2. Interpret physical and patient assessment findings

3. Assess each medication for appropriateness, effectiveness, safety, and patient adherence.

4. Assess health and functional status, risk factors, health data, cultural factors, health literacy, and access to medications or other aspects of care.

5. Assess immunization status and the need for preventive care and other health care services.

6. Integrate knowledge, clinical experience, and patient data to formulate and test hypotheses about the etiology of medication-related problems. (Generate hypotheses)

7. Establish potential and actual medication-related problems.

iii. Plan: Develop an individualized patient-centered care plan in collaboration with other health care professionals and the patient/caregiver.

1. Therapeutic Goals: Develop specific and general therapeutic goals for the patient. These goals achieve clinical outcomes in the context of the patient's overall health care goals and access to care.

2. Therapeutic Plan: Integrate knowledge, evidence-based literature/information, clinical experience, patient data, patient goals and desires, and the prescriber's judgment when developing the best pharmacotherapeutic plan for the patient.
 - a. Therapeutic Alternatives: Evaluate pharmacotherapeutic alternatives for the patient before establishing the therapeutic plan.
 - b. Develop the Therapeutic Plan: This plan addresses medication-related problems and optimizes medication therapy. Considerations for the plan include:
 - i. Goals and desires of the patient
 - ii. Application of established practice guidelines, evidence-based medicine, and population-based treatment plans in developing the plan.
 - iii. Accurate and patient-specific dosing (including dosage adjustment for renal/hepatic dysfunction, starting dose, maximum doses, timing of doses and pharmacokinetic design for narrow therapeutic index drugs,).
 - iv. Parameters for monitoring response and frequency of monitoring
 - v. Parameters for monitoring adverse effect and frequency of monitoring
 - vi. Plan for patient counseling/education
 - vii. Supports care continuity, including follow-up and transitions of care as appropriate.
 - c. Patient/Caregiver engagement: The patient/caregiver are involved through education, empowerment, and self-management.
 - iv. Implement: Implement the care plan in collaboration with other health care professionals and the patient/caregiver. When implementing the care plan, the following are accomplished:
 1. Medication and health-related problems are addressed.
 2. Preventative care including vaccine administration are provided.
 3. Medication therapy is initiated, modified, discontinued, or administered as authorized.
 4. Education and self-management training is provided to the patient/caregiver.
 5. Refers and provides transitions of care as needed.
 6. Schedules follow-up care as needed to achieve goals of therapy.
 - v. Follow-up (Monitor and Evaluate): Monitor and evaluate the effectiveness of the care plan and modify the plan in collaboration with other health care professionals and the patient/care giver. The following are continually monitored and evaluated:
 1. Medication appropriateness, effectiveness, and safety and patient adherence through available data, biometric test results and patient feedback.
 2. Clinical endpoints that contribute to the patient's overall health.
 3. Outcomes of care, including progress toward or achievement of goals.
 - vi. Patient-Centered Care: Foster a patient-centered care approach by accomplishing the following:
 1. Communicate: Succinctly communicate with other health care team members and the patient/caregiver throughout the patient care process.
 2. Collaborate: Discuss with team members the specific therapeutic approaches for individual patients based on scientifically and logically validated assessment of the patient's health care needs and an ethical consideration of the patient's health care goals and desires.
 3. Document: Prepare a written communication that is well-organized, logical, complete, appropriate, and evidence-based.
 - b. Apply and integrate foundational knowledge (i.e., pharmaceutical, social/behavioral/administrative, and clinical sciences) throughout the patient care process. This will require the ability to:
 - i. Describe the pathophysiology of disease state(s) and identify appropriate drug targets (cellular/molecular), biochemical processes, and organ changes for therapeutic intervention. Specifically, for a given disease state:
 1. Describe the basic pathophysiology of the disease including an explanation of the abnormal processes and the resulting disease signs and symptoms.
 2. Outline risk factors and/or diagnostic indicators (e.g., lab values, diagnostic test results).
 3. Determine classes of drugs that will treat the disease state and ameliorate the

underlying pathophysiology and signs/symptoms.

- ii. Apply knowledge about structure-activity relationships and cellular/molecular mechanisms of action to identify drug classes that are appropriate for treatment of the disease state. Specifically, for each drug class:
 1. Identify the relevant therapeutic targets and explain the mechanism(s) of action.
- iii. Describe major pathways for metabolism and the pharmacological/therapeutic consequences of metabolism.
- iv. Recommend any unique storage, handling, or use requirements to ensure patient safety and clinical efficacy.
- v. Discuss significant pharmacokinetic and pharmacodynamic considerations.
- vi. Compare and contrast the therapeutic and adverse effects of drug classes that are appropriate for treating the disease state.
 1. Identify the most common/serious drug interactions and adverse effects.
 2. Identify important precautions and contraindications.
- vii. Compare and contrast the therapeutic and adverse effects of drugs within a given class and then recommend the best drug for the patient.
- viii. Integrate the following transcending concepts when assessing a patient and developing a care plan:
 1. Apply foundational concepts about health information and informatics (Informatics) related to data quality and medication safety
 2. Evaluate meta-analyses and apply to patient needs (Evidence-based practice)
 3. Use oral and written communication skills for inter professional communication (Communication)
 4. Address disparity issues/stigmatism related to renal patients (Social considerations)
 5. Consider a patient/families perspective about death and dying when providing care (Behavioral considerations).
 6. Address issues related to law and ethics.
 7. Consider the role of personalized medicine in the treatment of hepatitis C (Personalized Medicine)
 8. Provide individualized dosing recommendations in patients with renal and hepatic disease and patients on dialysis (Pharmacokinetics)
 9. Assess the role of nonprescription/herbal products for the management of gastric reflux (Self-care: OTC)
 10. Use SBAR when communicating with another health professional (Interprofessional collaboration)
 11. Medication safety
 12. Population-based care
3. Demonstrate the ability to be an effective team member by collaborating in preparing for class sessions and in solving case studies.

Course Textbook(s) and/or Other Assigned Reading

1. Foye WO, Lemke T, Williams DA. Foye's Principles of Medicinal Chemistry, Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia, PA, 7th Edition, 2013. ISBN-13:978-1609133450; ISBN-10:1609133455

2. AccessPharmacy, McGraw-Hill Professional, New York, NY (This resource is available through the UF Health Science Center Library.) The following resources will be frequently used:

- o Brunton L. Goodman and Gilman's The Pharmacological Basis of Therapeutics, McGraw-Hill Professional, New York, NY, 12th Edition, 2011. ISBN-13:978-0071624428; ISBN-10:0071624422 (Available in Access Pharmacy)
- o Dipiro, J, Talbert R, Yee G, Matzke G, Wells B, Posey L. Pharmacotherapy – A pathophysiologic approach. McGraw-Hill Professional, New York, NY, 9th Edition, 2014. ISBN-13:978-0071800532; ISBN-10:0071800530 (Available in Access Pharmacy)
- o Other available resources include: Multiple textbooks, Calculators, Pharmacotherapy Casebook and Care Plans, Cases, Self-Assessments and Multimedia Videos

3. Readings from the primary literature will also be assigned where appropriate.

Weekly Schedule of Topics Week 1:

Module 1 - Introduction to the Gastrointestinal System

Module 2 - Common Gastrointestinal Complaints and Inflammatory Bowel Disease

Week 2:

Module 3 - Colorectal Cancer

Module 4: Hepatic Disease

Week 3:

Exam #1

Module 5: Nutrition and Weight Management

Module 6: Introduction to the Renal System

Week 4:

Module 7: Renal Failure & Disease

Week 5:

Exam #2

Module 8: Infectious Diseases of the Kidney

Week 6:

Module 9: Gastrointestinal Infections

Week 7:

Capstone Case Studies (No new content; Preparation for Final Exam)

Final Exam

Grading Scheme Item Percent of Grade

Individual Quizzes (N = 13) 10%

Team Assessment (N=13) 20%

(Includes CATME peer assessment)

Exam #1 20%

Exam #2 20%

Final Exam 30%

Additional Links and PoliciesClass Attendance Policy

Policy Across All 1PD-3PD courses:

Class attendance is mandatory for active learning sessions such as problem-solving sessions, case discussions, and laboratory sessions. Student attendance may be excused by the Teaching Partnership Leader in the following situations: documented illness, serious family emergencies, military obligation, severe weather conditions, religious holidays, and other reasons of serious nature. The Pharm.D. calendar allows for participation in special curricular requirements (e.g., professional meetings). Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) are excused. Conflict with work schedules is an unexcused absence.

Requests for excused absences MUST be made by an email to the Academic Coordinator and the course facilitator prior to the scheduled session or if it is an emergency situation, as soon as possible. The student is responsible for follow up and confirming whether the absence is excused or unexcused. The Teaching Partnership Leader, Academic Coordinator, and your campus specific director must be CCD in this communication. The following format is recommended:

Failing to follow this policy will render the absence not excusable. A request for an "excused absence" does not guarantee acceptance. No precedence can be drawn from any courses in the College of Pharmacy or any other college within University of Florida. Makeup assignment(s) will be made for any excused absence(s) and will typically be submitted within one-week of the missed session(s). If the situation leads to missing multiple class sessions and makeup becomes difficult, the student and Teaching Partnership Leader will meet with the Associate Dean of Student Affairs to develop options such as a makeup/remediation plan or course withdrawal. The time period for this make up will be consistent with the UF attendance policies.

Class attendance requires full engagement of activities and discussions. The following are unacceptable during class: 1) read non-course related materials that are either in hard-copy or web-based, 2) study for other courses, 3) use a laptop for activities that are not course-related. Class participation will be reduced in such situations.

Please refer to the University Attendance Policy at

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Additional Policy Specific to This Course:

None

Quiz/Exam Policy

During the Exam:

1. Students must arrive and be seated promptly to be eligible to take the exam. To maintain exam security, students who arrive late for the exam will not be allowed to start the exam if they are more than 30 minutes late or if another student has left the room after seeing the exam. Students who have valid reasons for arriving late at the exam may request a makeup exam as outlined below.
 2. No talking or other disruptive behavior during the distribution or taking of the exam.
 3. Calculators must meet the following requirements: Only nonprogrammable calculators are allowed during exams for this course.
 4. If you encounter calculator problems (e.g., dead battery), contact the Proctor.
 5. Nonessential materials are NOT allowed at the student's desk during examination periods. Please leave all nonessential materials outside of or in the front of the examination room.
 6. Other exam rules may be instituted during the progression of the course.
 7. Once the exam commences, students may not leave the room without first turning in the exam. Once the exam is turned in, the examination period for the student is considered complete and the student must leave the examination room. If there is urgent need to use the restroom, the Proctor will provide guidance.
- Failure to follow exam rules may be considered as evidence of academic dishonesty.

Policies Related to iRAT/tRAT

1. Students must bring their laptop to class in order to participate in the iRAT and tRAT.
2. Students who are late for an iRAT may begin the iRAT when arriving, but will be required to close the iRAT at the end time established for the entire class by the instructor (i.e., students who are late will not have the entire time).
3. Students may not leave the room during the iRAT and tRAT. All students must

remain quiet during the testing period.

4. One comprehensive final exam will be administered at the end of course. The exam will be given simultaneously on all campuses and will include multiple choice, true/false and matching questions.

After the Exam

Policy across All 1PD-3PD courses:

1. Students are required to upload the encrypted exam file within 24 hours of completing the exam to the SofTest website.
 - a. If the encrypted file is not uploaded within 24 hours, the student's exam score will be reduced by 10%.
2. Graded exam appeals
 - a. Following release of the exam grades, the student has 3 business days to contact the Facilitator and Teaching Partner to clarify questions and appeal any possible grading errors. For courses that accept exam question appeals, see course specific information below.

Additional Policy Specific to This Course:

None

Make-up Quiz/Exam Policy

Policy across All 1PD-3PD courses:

Makeup exams are given only under special circumstances. If the student is unable to take a scheduled examination, the Teaching Partnership Leader and Academic Coordinator must be notified before the examination or if it is an emergency situation, as soon as possible. In addition, a written letter of explanation requesting that the absence from the exam be excused, must be presented before the exam or if an emergency situation as soon as possible. An excused absence is allowable in the following situations: documented illness, serious family emergencies, military obligation, severe weather conditions, religious holidays, participation in special curricular requirements, excused absences for court-imposed legal obligations, and other reasons of serious nature. All excused absences will be considered on an individual basis by the Teaching Partnership Leader. For unusual situations (e.g., wedding that was planned before admission), the faculty member will communicate with student affairs.

The questions on the makeup exam may be in the form of essay, short answer, or multiple-choice and will be the same level of difficulty as the exam administered during the scheduled time. With the exception of highly extenuating circumstances, failure to follow the prescribed procedures or failure to attend the announced examination will result in a grade of zero for that exam. No precedence can be drawn from any courses in the College of Pharmacy or any other college within University of Florida.

The instructor will arrange an alternate deadline for the exam consistent with the University examination policies.

The student may contact the instructor to obtain details about why points were deducted. The student has two weeks following the return of the Exam to clarify any questions and appeal any possible grading errors. Any appeals on the final examination must be made in writing and submitted to your facilitator. When an appeal is made to re-grade an Exam, the entire Exam will be reevaluated and scored.

Additional Policy Specific to this Course:

None.

Policy on Old Quizzes and Assignments

Old quizzes and assignments are not provided.

General College of Pharmacy Course Policies

The following policies apply to all courses in the College of Pharmacy and are available on

the COP website:

University Grading Policies

Please visit the following URL to understand how the University uses the course grade to compute your overall GPA:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Concerns, Appeals, and Complaints

Students who have concerns about their evaluation of performance and/or student-faculty relations should review the Student-Faculty Handbook for guidance. The Student-Faculty Handbook also outlines the chain of command for any appeals and/or complaints.

Academic Integrity Policy

Students are expected to act in accordance with the University of Florida policy on academic integrity

(<http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php>). This Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions.

Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult the course's Teaching Partnership Leader.

Students are also expected to abide by the UF Honor Code.

The following is the UF Honor Pledge: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code.

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Psychomotor and Learning Expectations

Psychomotor expectations relate to the ability to meet the physical demands of the pharmacy curriculum. Physically impaired students and students with learning disabilities such as hearing impairment, visual impairment, dyslexia or other specific learning disabilities such as sensory deficit or sensory-motor coordination problems should cooperate with the faculty and staff in addressing these problems in order to meet academic standards.

How to Request Learning Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to both the instructor and the academic coordinator when requesting accommodations. Students at all campuses are also expected to provide a copy of the letter of accommodations to the Office of Student Affairs in Gainesville since some learning activities/exams/assessments require their assistance.

- Students with disabilities should follow this procedure as early as possible in the semester. It is strongly recommended that the procedure be done before the course starts so there is sufficient time to arrange accommodations and so that all learning activities/exams/assessments for the course are arranged.
- Please note that you must arrange for accommodations in advance; grades cannot

be retroactively changed.

Faculty and Course Evaluations

Students are expected to provide feedback on the quality of instruction in every course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu> . Evaluations are typically open around mid-semester and need to be completed by the established deadline. Summary results of these assessments are available to students at <https://evaluations.ufl.edu> .

Computer and Other Technology Requirements

Students are required to meet the following computer and technology requirements: <http://pharmacy.ufl.edu/education/student-affairs/admissions/student-computer-requirements/>

ExamSoft® is used for administration of exams and students are required to follow the procedures that are established for exam administration. Students must bring a laptop to class to complete exams and this laptop must meet the computer and technology requirements established by the College. These technology requirements require a backup battery with at least 2 hours of life. Students must also complete mock exams prior to the actual exam to assure that all computer features are supported by ExamSoft®.

Expectations In Class and Other Learning Activities

Students are expected to:

- ? Be diligent and timely in studying the course material.
- ? Be on time for class sessions, quizzes, and exams.
- ? Be prepared for group discussions and conference calls.
- ? Do your own work.
- ? Actively collaborate with peers when assigned to groups.
- ? Inform the course coordinator about an absence from an exam or other assigned class activity at least 24 hours prior to the event.
- ? Dress appropriately for class sessions or clinically related activities.
- ? Turn off cell phones and other electronic communication devices during a class session or phone conference.
- ? Be quiet during class sessions including peer presentations.
- ? Be focused and avoid distractive behaviors in class.
- ? Appropriately use the computer in class, i.e., do not be looking at unrelated information on the web site during class.
- ? Participate in class or group discussions.
- ? Raise one's hand to be recognized before making a comment during a class session.
- ? Be respectful to the teacher.
- ? Be respectful to fellow students in discussions.
- ? Be courteous, respectful, and civil when using discussion boards.
- ? Focus on the course learning activities; it is not respectful to study for other coursework during the class session.
- ? Address faculty with the appropriate title and name, i.e., Dr. (last name) or Professor (last name).
- ? Address concerns about performance or course material directly with the course coordinator, facilitator, or teaching assistant.
- ? Seek assistance with academic or personal difficulties as soon as possible.

Communications

Course-related Communications

Students with questions about course content should post questions on the discussion board. Questions that are personal in nature (illness, emergencies, excused absence

request, request for accommodations) should email the course teaching partnership leader and copy the Academic Coordinator and Distant Campus Dean. The student may email the course leader for any other needs that are personal in nature.

Faculty member Response Time:

1. The Course Coordinators/instructors will work to respond to postings within 24 hours of the posting between Monday and Friday 12N. Responses on weekends and holidays will be sporadic. (On weekends when assignments are due, students are advised to post questions before 12 Noon on Friday.)

Email Communications:

1. When communicating with faculty via email, the subject line needs to include the course number & title.
2. At the end of the email, in addition to listing your name, list your academic year and campus/site.

Discussion Board Policy

The purpose of the discussion board is to provide a venue for you to enhance your learning. This is accomplished by having a thread for each module where you can post questions to the course coordinators. (A thread is a single link that is devoted to a topic.) The discussion board is also a place where your instructors may post virtual cases for you to work up.

Such interaction on the discussion boards with the instructors will allow you to clarify your questions and apply what you are learning in other parts of the course. The goal of these discussions is to help you learn.

Students Netiquette on the Discussion Board:

1. Post your comment on the correct discussion thread. If you have a question about A1 (Unit A - Module 1), post it in the discussion thread for A1 and not the B1 thread.
2. The discussion board is not a place to complain. Complaints should instead be directed directly to the instructor via email. This allows the primary course coordinator to quickly address your concern without causing distraction to other students who have limited time and want to focus on learning.
3. Use "netiquette." If you have never learned "netiquette" - please visit the following URL: <http://www.albion.com/netiquette/corerules.html> If you follow the rules of netiquette described in this URL, you will avoid posting an embarrassing or inappropriate comment.
4. The discussion board has been designed to allow you a place to ask further questions on the material to clarify any confusion, gain a deeper understanding of the material, or ask general course questions. A question you might see on a discussion board is "What do I need to study for the exam?" Please reflect on how this question can be perceived by your lecturing faculty as well as your fellow classmates. Rewording the question to address a specific topic would be more appropriate. For example, "Dr. XX, you listed numerous side effects for drug XX on slide XX. Of those, what are the most relevant that we could expect to occur and monitor for in clinical practice." The type of material that is covered in these classes is material that is important for patient care. All of this material is important. There are variations in courses, but please make use of your syllabus since there might be guidance on how to prepare for various exams in your classes.
5. In most situations, lectures are released as planned by the course coordinators. Clarifying at the beginning of a semester on the planned release date/time, if not posted in the syllabus, is appropriate. Continual posts on the discussion board on weekly basis can become overwhelming for the course coordinator as well as your fellow students.

Question/Answer sessions in live class sessions:

Time is usually reserved at the end of the class for questions regarding the material to clear up any confusion or expand on material covered in the particular section. This is a valuable time for all students and since time is limited, the questions should focus on the

topics at hand. Questions such as, "What material will be covered on an upcoming exam?" or, "Do we need to know dosing for the exam?" are inappropriate during this time period. In our profession, all material is important. However, if this question does need to be asked, please consider using the discussion board to clarify any specific exam questions.

Student Complaint Process

Concerns about the course (e.g., course requirements, quizzes, exams) should first be discussed with the appropriate course instructor and the Teaching Partnership Leader. If a satisfactory resolution is not achieved, the student may appeal to the Associate Dean for Curricular Affairs and Accreditation who will also engage other individuals depending on the request (e.g., campus dean, department chair, Associate Dean for Student Affairs). If the student finds the decision unsatisfactory, the student may appeal to the Dean of the College of Pharmacy. If this decision is unsatisfactory, the student may appeal to the Ombuds office (https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf).

Religious Holidays

Please see the University policy on attendance and religious holidays:
<http://www.registrar.ufl.edu/catalog/policies/regulationattendance.html#religious>.

Counseling and Wellness Center

Students who are experiencing issues and events that could adversely affect academic performance and personal health should be encouraged to meet with the course coordinator or facilitator or appropriate administrator for guidance. Students in the Gainesville area may contact the UF Counseling and Wellness Center for Gainesville students (352-392-1575; <http://www.counseling.ufl.edu>). Students outside the Gainesville area may obtain similar contact information from the campus/program administrator.

Emergencies

Call the University Police Department for emergencies: 392-1111 or 9-1-1

Student Crisis

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Students who are experiencing issues and events are also encouraged to contact their local

crisis center. For Alachua County the Crisis Center number is 352-264-6789; for Jacksonville and

Duval County 904-632-0600 and toll free for Northeast Florida at 1-800-346-6185; and for Orlando 407-425-2624.

The following national call numbers are also available for students who reside outside of the main COP campuses: a) 1-800-273-8255, and b) 1-800-784-2433.

How to Access Services for Student Success

Students who need guidance for course success or who are having academic difficulty should contact their advisor/facilitator or Campus Director/Senior Associate Dean for

assistance.

Faculty Lectures/Presentations Download Policy

Photography, Audio-visual recording, and transmission/distribution of classroom lectures and discussions is prohibited unless there is expressed written permission. Recorded lectures and class sessions are authorized solely for the purpose of individual or group study with other UF College of Pharmacy students enrolled in the same class. Such recordings may not be reproduced, shared, or uploaded to publicly accessible web environments. Students who do not adhere to this policy will be considered to be breaching COP copyrights and/or FERPA law.

Instructor(s) Randy Hatton, BPharm, PharmD, FCCP, BCPS (Academic Director)

Margaret James, Ph.D.

Eric Krause, Ph.D.

Lindsey Childs-Kean, Pharm.D.

**PHA5784C Patient Care 4:
Gastrointestinal & Renal Disorders**

**Spring 2017 – Block 10
6 Credit Hours**

Course Purpose:

Fourth of an eight course sequence that prepares the student to provide patient-centered care by serving as a collaborative interprofessional team-member who is an authority on pharmacotherapy. The course continues to prepare the student to be a collaborative team member since learning involves teamwork. This course focuses on providing patient-centered care to patients who have a gastrointestinal or renal disorders. Learners will develop, integrate, and apply knowledge from the foundational disciplines (i.e., *pharmaceutical, social/behavioral/administrative*, and *clinical sciences*) and apply the Pharmacists' Patient Care Process in solving case-based scenarios of patients with gastrointestinal and renal disorders.

Course Faculty and Office Hours

(See **Appendix A** for Who to Contact)

Academic Director: Randy Hatton, BPharm, PharmD, FCCP, BCPS

Email: rhatton@cop.ufl.edu

Office: HPNP 2331

Phone: 352-294-5785

Office Hours: By appointment

Core Teaching Partners:

Name	Email: address	Phone:
Margaret James, Ph.D.	mojames@ufl.edu	352-273-7707
Eric Krause, Ph.D.	ekrause@cop.ufl.edu	352-273-6977
Lindsey Childs-Kean, Pharm.D.	lchilds-kean@cop.ufl.edu	727-394-6213

Appendix B contains the contact information for all teaching partners

Instructional Designer:

Justin DeLeo

Academic Coordinator

Name - TBD

Email:

Office:

Phone:

Office Hours: by email and appointment

This Course Will Prepare You to Perform the Following Activities Which the Public Entrusts a Pharmacist to Perform:

1. **EPA A1.** Collect subjective and objective data by performing a patient assessment and gathering data from chart/electronic records, pharmacist records, other health professionals and patient/family interviews.
2. **EPA A2.** Interpret patient data, and identify medication-related problems and develop a prioritized problem list.
3. **EPA A3.** Formulate evidence-based care plans in collaboration with an interprofessional team. Utilize clinical guidelines in the development of a pharmacotherapy plan.
4. **EPA A4.** Document a patient/clinical encounter electronically/in writing.
5. **EPA A5.** Provide counseling and medications and health wellness (including referral when there are social determinants of health and disparities).
6. **EPA A6.** Assess and counsel a patient about health-wellness.
7. **EPA A7.** Present a succinct oral patient summary and plan to a health care provider. Defend a therapeutic plan verbally or in writing using references, guidelines, or primary literature.
8. **EPA A8.** Give and receive a patient handover to transition care.
9. **EPA A9.** Collaborate as a member of an interprofessional team and provide patient-centered care.

Course-Level Objectives

1. **Upon completion of this course, the student will be able to provide patient-centered care for patients with one or more of the following diseases, disorders or pharmacotherapy needs:**
 - a. Peptic ulcer disease (including self-care)
 - b. Gastro-esophageal reflux disease (GERD) (including self-care)
 - c. Inflammatory Bowel Disease
 - d. Nausea and vomiting (including self-care)
 - e. Diarrhea (including self-care)
 - f. Constipation (including self-care)
 - g. Irritable Bowel Syndrome (including self-care)
 - h. Diverticulitis
 - i. Hepatitis
 - j. Portal Hypertension and cirrhosis
 - k. Nutrition
 - l. Weight Management
 - m. Fluid and electrolyte disorders
 - n. Acid-base Balance
 - o. Drug-induced kidney disease
 - p. Acute Renal Failure
 - q. Chronic Kidney Disease
 - r. Hemodialysis and peritoneal dialysis
 - s. Complicated urinary tract infections (cUTIs)
 - t. Pyelonephritis
 - u. Intra-abdominal Infections
 - v. *Clostridium difficile* infections
 - w. Colorectal Cancer

2. Specifically, given a case of a patient with one or more of the above disorders/pharmacotherapy needs:

a. **Integrate knowledge and use clinical reasoning skills in accomplishing the following steps when managing a patient with the disease state:**

- i. **Collect:** Gather subjective and objective information about the patient in order to understand the relevant medical and medication history and clinical status of the patient.
 1. Subjective and objective information is collected through patient interview, medical record review, pharmacy profile review, and communication with other members of the health care team.
 2. A Holistic View is initiated during collection in order to consider physiological, psychological, and sociological variables of the patient and this view is maintained throughout the patient care process.
- ii. **Assess:** Assess the information collected and analyze the clinical effects of the patient's therapy in the context of the patient's overall health goals in order to identify and prioritize problems and achieve optimal care.
 1. Understand, explain, and assess a patient's health status.
 2. Interpret physical and patient assessment findings
 3. Assess each medication for appropriateness, effectiveness, safety, and patient adherence.
 4. Assess health and functional status, risk factors, health data, cultural factors, health literacy, and access to medications or other aspects of care.
 5. Assess immunization status and the need for preventive care and other health care services.
 6. Integrate knowledge, clinical experience, and patient data to formulate and test hypotheses about the etiology of medication-related problems. (Generate hypotheses)
 7. Establish potential and actual medication-related problems.
- iii. **Plan:** Develop an individualized patient-centered care plan in collaboration with other health care professionals and the patient/caregiver.
 1. **Therapeutic Goals:** Develop specific and general therapeutic goals for the patient. These goals achieve clinical outcomes in the context of the patient's overall health care goals and access to care.
 2. **Therapeutic Plan:** Integrate knowledge, evidence-based literature/information, clinical experience, patient data, patient goals and desires, and the prescriber's judgment when developing the best pharmacotherapeutic plan for the patient.

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- a. **Therapeutic Alternatives:** Evaluate pharmacotherapeutic alternatives for the patient before establishing the therapeutic plan.
 - b. **Develop the Therapeutic Plan:** This plan addresses medication-related problems and optimizes medication therapy. Considerations for the plan include:
 - i. Goals and desires of the patient
 - ii. Application of established practice guidelines, evidence-based medicine, and population-based treatment plans in developing the plan.
 - iii. Accurate and patient-specific dosing (including dosage adjustment for renal/hepatic dysfunction, starting dose, maximum doses, timing of doses and pharmacokinetic design for narrow therapeutic index drugs,).
 - iv. Parameters for monitoring response and frequency of monitoring
 - v. Parameters for monitoring adverse effect and frequency of monitoring
 - vi. Plan for patient counseling/education
 - vii. Supports care continuity, including follow-up and transitions of care as appropriate.
 - c. **Patient/Caregiver engagement:** The patient/caregiver are involved through education, empowerment, and self-management.
 - iv. **Implement:** Implement the care plan in collaboration with other health care professionals and the patient/caregiver. When implementing the care plan, the following are accomplished:
 - 1. Medication and health-related problems are addressed.
 - 2. Preventative care including vaccine administration are provided.
 - 3. Medication therapy is initiated, modified, discontinued, or administered as authorized.
 - 4. Education and self-management training is provided to the patient/caregiver.
 - 5. Refers and provides transitions of care as needed.
 - 6. Schedules follow-up care as needed to achieve goals of therapy.
 - v. **Follow-up (Monitor and Evaluate):** Monitor and evaluate the effectiveness of the care plan and modify the plan in collaboration with other health care professionals and the patient/care giver. The following are continually monitored and evaluated:

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1. Medication appropriateness, effectiveness, and safety and patient adherence through available data, biometric test results and patient feedback.
 2. Clinical endpoints that contribute to the patient's overall health.
 3. Outcomes of care, including progress toward or achievement of goals.
- vi. **Patient-Centered Care:** Foster a patient-centered care approach by accomplishing the following:
1. **Communicate:** Succinctly communicate with other health care team members and the patient/caregiver throughout the patient care process.
 2. **Collaborate:** Discuss with team members the specific therapeutic approaches for individual patients based on scientifically and logically validated assessment of the patient's health care needs and an ethical consideration of the patient's health care goals and desires.
 3. **Document:** Prepare a written communication that is well-organized, logical, complete, appropriate, and evidence-based.
- b. **Apply and integrate foundational knowledge (i.e., pharmaceutical, social/behavioral/administrative, and clinical sciences) throughout the patient care process.** This will require the ability to:
- i. Describe the pathophysiology of disease state(s) and identify appropriate drug targets (cellular/molecular), biochemical processes, and organ changes for therapeutic intervention. Specifically, for a given disease state:
 1. Describe the basic pathophysiology of the disease including an explanation of the abnormal processes and the resulting disease signs and symptoms.
 2. Outline risk factors and/or diagnostic indicators (e.g., lab values, diagnostic test results).
 3. Determine classes of drugs that will treat the disease state and ameliorate the underlying pathophysiology and signs/symptoms.
 - ii. Apply knowledge about structure-activity relationships and cellular/molecular mechanisms of action to identify drug classes that are appropriate for treatment of the disease state. Specifically, for each drug class:
 1. Identify the relevant therapeutic targets and explain the mechanism(s) of action.
 - iii. Describe major pathways for metabolism and the pharmacological/therapeutic consequences of metabolism.
 - iv. Recommend any unique storage, handling, or use requirements to ensure patient safety and clinical efficacy.
 - v. Discuss significant pharmacokinetic and pharmacodynamic considerations.

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- vi. Compare and contrast the therapeutic and adverse effects of drug classes that are appropriate for treating the disease state.
 1. Identify the most common/serious drug interactions and adverse effects.
 2. Identify important precautions and contraindications.
 - vii. Compare and contrast the therapeutic and adverse effects of drugs within a given class and then recommend the best drug for the patient.
 - viii. Integrate the following transcending concepts when assessing a patient and developing a care plan:
 1. Apply foundational concepts about health information and informatics (Informatics) related to data quality and medication safety
 2. Evaluate meta-analyses and apply to patient needs (Evidence-based practice)
 3. Use oral and written communication skills for inter professional communication (Communication)
 4. Address disparity issues/stigmatism related to renal patients (Social considerations)
 5. Consider a patient/families perspective about death and dying when providing care (Behavioral considerations).
 6. Address issues related to law and ethics.
 7. Consider the role of personalized medicine in the treatment of hepatitis C (Personalized Medicine)
 8. Provide individualized dosing recommendations in patients with renal and hepatic disease and patients on dialysis (Pharmacokinetics)
 9. Assess the role of nonprescription/herbal products for the management of gastric reflux (Self-care: OTC)
 10. Use SBAR when communicating with another health professional (Interprofessional collaboration)
 11. Medication safety
 12. Population-based care
- 3. Demonstrate the ability to be an effective team member by collaborating in preparing for class sessions and in solving case studies.**

Pre-Requisite or Co-Requisite Knowledge and Skills

1. Pre-requisite: Completion of all Year 1 Pharm.D. program coursework including milestones
2. Pre-requisite: PHA 5781 Patient Care 1*
3. Pre-requisite: PHA 5755 Principles of Medical Microbiology, Immunology, and Virology
4. Pre-requisite: PHA 5782 Patient Care 2: Infectious Diseases and Oncology*

5. Pre-requisite: PHA 5783C Patient Care 3: Cardiovascular and Pulmonary Diseases*

6. Co-Requisite: PHA 5163L Professional Practice Skills Lab IV

*These pre-requisites may be waived with the consent of the Academic Performance Committee

Course Outline

Case studies will involve application of what has been learned to date during the Pharm.D. curriculum. Students are responsible for addressing all disorders and related patient problems that have been previously learned.

Appendix C provides a guide for students in working up case studies.

ALERT about Schedule: Please routinely check your campus calendar and the Canvas course site for any messages about changes in the schedule including meeting dates/times, deadlines, and room changes

*Case Studies and Capstone Sessions are active learning sessions that allow for application of other coursework. Since part of the time involves interaction with team members rather than faculty members, a 2.0 hr contact time is equivalent to 1.0 hr of instructor contact time.

**Transcending concepts provide content that will be applied during the Case Studies.

<i>Date Recommended Dates for Viewing Videos</i>	Module and Unit	Unit Topic Learning Resources will include Lecture Videos and readings.	Contact Hours [hr] ^a	Faculty
	Module 1: Introduction to the Gastrointestinal System (Approximately 10 hours of direct instruction & 20 hours out of class; total = 30 hr) Pharmacology: Karen Whalen Medicinal Chemistry: Margaret James PTR: Karen Whalen & Reggie Frye		10	
Jan 13 (F)	1A	Video-Lecture: Pathophysiology of the GI System	1.5	Whalen & Frye
Jan 13 (F)	1B	Video-Lecture: Pharmacology of GI Drugs	2	Whalen
Jan 13 (F)	1C	Video-Lecture: Medicinal Chemistry of GI Drugs	1	James
Jan 18 (W)	Thru 1C	Case Studies: GI Disease (includes individual and team quizzes)	2 (4 workup)	Frye, James, Whalen
Jan 18 (W)	1E	Video-Lecture: Management of Peptic Ulcer Disease	1	Whalen

Jan 18 (W)	10A	Video-Lecture: Transcending Concept: Evidence-Based Practice-- Meta-analyses of safety and efficacy studies (assessment of heterogeneity and publication bias, fixed and random effects models)	0.5	Hatton
Jan 18 (W)	1F	Video-Lecture: Transcending Concept: Self Care—GERD (reinforce Patient Care 1)	1	Whalen
Jan 19 (Th)	Thru 1F	Case Studies: Ulcers (includes individual and team quizzes)	2 (4 workup)	Frye, James, & Whalen
		Module 2: Common Gastrointestinal Complaints and Inflammatory Bowel Disease (Approximately 17.5 hours of direct instruction & 35 hours out of class; total = 52.5 hr) Pharmacology: TBD Medicinal Chemistry: Jane Aldrich PTR: Karen Whalen	17.5	
Jan 20 (F)	2A	Video-Lecture: Pharmacology of GI Drugs: Bismuth Subsalicylate, Loperamide, Diphenoxylate, Bulk-forming Agents, Emollients	1.5	Whalen
Jan 20 (F)	2B	Video-Lecture: Medicinal Chemistry of GI Drugs: Bismuth Subsalicylate, Loperamide, Diphenoxylate, Bulk-forming Agents, Emollients	1	Aldrich
Jan 20 (F)	2C	Video-Lecture: Management of Nausea & Vomiting—including Self-care	2	Motycka & Weitzel
Jan 20 (F)	2D	Video-Lecture: Management of Diarrhea, Constipation, Irritable Bowel Syndrome—including Self-care	1.5	Motycka & Weitzel
Jan 20 (F)	2E	Video-Lecture: Management of Diverticulosis	0.5	TBD
Jan 20 (F)	2F	Video-Lecture: Transcending Concept: Behavioral—Stress	1	Miller
Jan 23 (M)	Thru 2F	Case Studies: Common GI Complaints (includes individual and team quizzes)	2 (4 workup)	Aldrich, Miller, Motycka, Weitzel, Whalen, & TBD
Jan 25 (W)	2G	Video-Lecture: Pharmacology of Anti-inflammatory Agents: Aminosalicylates, Azathioprine, Biologicals	2	TBD

Jan 25 (W)	2H	Video-Lecture: Medicinal Chemistry of Anti-inflammatory Agents: Aminosalicylates, Azathioprine, Biologicals	2	Aldrich
Jan 25 (W)	2I	Video-Lecture: Management of Inflammatory Bowel Disease	2	TBD
Jan 26 (Th)	Thru 2I	Case Studies: Inflammatory Bowel Disease (includes individual and team quizzes)	2 (4 workup)	Aldrich & TBD
	Module 3: Colorectal Cancer (Approximately 4.5 hours of direct instruction & 9 hours out of class; total = 13.5 hr) PTR: TDB		4.5	
Jan 26 (Th)	3A	Video-Lecture: Management of Colorectal Cancer	1.5	TBD
Jan 26 (Th)	3B	Video-Lecture: GI Health & Wellness (colorectal screening, obesity, etc.)	1	TBD
Jan 27 (F)	Thru 3B	Case Studies: Colorectal Cancer (includes individual and team quizzes)	2 (4 workup)	TBD
	Module 4: Hepatic Disease (Approximately 7.5 hours of direct instruction & 15 hours out of class; total = 22.5 hr) Pharmacology: Lindsey Childs-Kean Medicinal Chemistry: Margaret James PTR: Lindsey Childs-Kean		7.5	
Jan 30 (M)	4A	Video-Lecture: Pharmacology of Hepatitis Antivirals	1	Childs-Kean
Jan 30 (M)	4A	Video-Lecture: Management of Hepatitis	2	Childs-Kean
Jan 30 (M)	4B	Video-Lecture: Management of Portal Hypertension & Cirrhosis	1.5	Childs-Kean
Jan 30 (M)	4C	Video-Lecture: Transcending Concept: Hepatitis C – Personalized Medicine	1	Childs-Kean
Feb 1 (W)	Thru 4C	Case Studies: Cirrhosis and Hepatitis (includes individual and team quizzes)	2 (4 workup)	Childs-Kean
Feb 2 (Th)	Exam #1 (Covers Modules 1-4)		2	
	Module 5: Nutrition & Weight Management (Approximately 8 hours of direct instruction & 16 hours out of class; total = 24 hr)		8	

		Pharmacology: Joanna Peris Medicinal Chemistry: Robert Huigens PTR: Carol Motycka		
Feb 3 (F)	5A	Video-Lecture: Pharmacology of Vitamins	1	TBD
Feb 3 (F)	5B	Video-Lecture: Pharmacology of Weight Loss Agents/Stimulants	1	Peris
Feb 3 (F)	5C	Video-Lecture: Medicinal Chemistry of Vitamins, Weight Loss Agents/Stimulants	1	Huigens
Feb 3 (F)	5D	Video-Lecture: Pharmacotherapy of Vitamins	1	Weitzel
Feb 3 (F)	5E	Video-Lecture: Obesity and Bariatric Dosing	1	Motycka
Feb 3 (F)	5F	Video-Lecture: Weight Loss—Including Self-care	1	Motycka
Feb 6 (M)	Thru 5F	Case Studies: Weight Loss (includes individual and team quizzes)	2 (4 workup)	Huigens, Motycka, Peris, Weitzel
		Module 6: Introduction to the Renal System (Approximately 7.75 hours of direct instruction & 15.5 hours out of class; total = 23.25 hr) Pharmacology: Eric Krause Medicinal Chemistry: Margaret James PTR: Stacy Voils	7.75	
Feb 6 (M)	6A	Video-Lecture: Pathophysiology of the Renal System	2	Krause & Dupree
Feb 8 (W)	6B	Video-Lecture: Fluids and Electrolytes	1	Voils & Feild
Feb 8 (W)	6C	Video-Lecture: Acid-Base Balance	1	Voils & Feild
Feb 8 (W)	6D	Video-Lecture: Estimating Renal Function—Re-enforce Dosage Individualization Yr 1	0.75	TBD
Feb 8 (W)	6E	Video-Lecture: Transcending Concept: Pharmacokinetic-Dosing in Hepatic / Renal Dysfunction	1	Bihorel
Feb 9 (Th)	Thru 6E	Case Studies: Renal Impairment (includes individual and team quizzes)	2 (4 workup)	Bihorel, Dupree, Feild, Krause, Voils, TBD
		Module 7: Renal Failure & Disease (Approximately 14.75 hours of direct instruction & 29.5 hours out of class; total = 44.25 hr) PTR: Lori Dupree	15.75	

Feb 10 (F)	7A	Video-Lecture: Drug-Induced Renal Disease	1.5	Dupree
Feb 10 (F)	7B	Video-Lecture: Acute Renal Failure	1.5	Dupree
Feb 13 (M)	Thru 7B	Case Studies: Acute Renal Failure (includes individual and team quizzes)	2 (4 workup)	Dupree
Feb 13 (M)	7C	Video-Lecture: Chronic Kidney Disease (including common problems such as anemia of CKD)	2.5	Dupree
Feb 13 (M)	7D	Video-Lecture: Transcending Concept: Health Information & Informatics—Foundation Informatics – Data Quality in CDSS	1	Hatton
Feb 15 (W)	7E	Video-Lecture: Transcending Concept: Drug Individualization—Dialysis; Hemodialysis and Peritoneal Dialysis	2	Childs-Kean, Dupree
Feb 15 (W)	7F	Video-Lecture: Transcending Concept: Population Care—Formulary Case (phosphate binders)	0.5	Hatton
Feb 15 (W)	10C	Video-Lecture: Transcending Concept: Medication Safety (HIT – New Problems-New Solutions)	1	Schentrup & Winterstein
Feb 22 (W)	8C	Video-Lecture: Transcending Concept: Health Disparities; Health Literacy—Renal Patients	1	Dupree
Feb 22 (W)	10E	Video-Lecture: Transcending Concept: Professionalism / Ethics	0.75	Allen
Feb 17 (F)	Thru 7F	Case Studies: Chronic Renal Failure (includes individual and team quizzes)	2 (4 workup)	Allen, Childs-Kean, Schentrup, Winterstein, Dupree, Hatton
Feb 20 (M)	Exam #2 (Covers Modules 5-7)		2	
	Module 8: Infectious Diseases of the Kidney (Approximately 4 hours of direct instruction & 8 hours out of class; total = 12 hr) PTR: Ken Klinker		4	
Feb 22 (W)	8A	Video-Lecture: Management of Complicated UTIs	1	Jourjy
Feb 22 (W)	8B	Video-Lecture: Management of Pyelonephritis	1	Klinker
Feb 23 (Th)	Thru 8C	Case Studies: Complicated UTIs (includes individual and team quizzes)	2 (4 workup)	Dupree, Jourjy, Klinker

	Module 9: Gastrointestinal Infections (Approximately 6 hours of direct instruction & 12 hours out of class; total = 18 hr) PTR: Lindsey Childs-Kean		6	
Feb 24 (F)	9A	Video-Lecture: Management of Gastrointestinal Infections	1	Childs-Kean
Feb 24 (F)	9B	Video-Lecture: Management of Intra-abdominal Infections	1	Childs-Kean
Feb 24 (F)	9C	Video-Lecture: Management of <i>Clostridium difficile</i> Infections	1	Klinker
Feb 24 (F)	10B	Video-Lecture: Transcending Concept: Interprofessional Communication—Present Oral/Written Plan Using Evidence	1	Vogel-Anderson
Feb 27 (M)	Thru 9C	Case Studies: Intra-abdominal Infections (includes individual and team quizzes)	2 (4 workup)	Klinker & Venugopalan
	Module 10: Capstone (Approximately 6 hours of direct instruction & 12 hours out of class; total = 18 hr) Pharmacology: Eric Krause Medicinal Chemistry: Margaret James PTR: Lindsey Childs-Kean		6	
Feb 27 (M)	1A-10F	Case Studies: Capstone #1 (includes individual and team quizzes)	2 (4 workup)	All Faculty
Feb 29 (W)	1A-10F	Case Studies: Capstone #2	2 (4 workup)	
Mar 1 (Th)	1A-10F	Case Studies: Capstone #3	2 (4 workup)	
Mar 2 (F)	All Modules	Comprehensive Final Exam (Items Cover All Modules and All Prior Coursework)	2.0	

^aThis column contains the direct contact hours [hr]. Double the number of hours is expected to be spent out of class (readings, studying, and preparation for class). Cases will be usually 4 hours, but will only count as 2 hours of time because time is devoted for students to discuss/learn in teams and learning involves recitation.

This course is estimated to require 270 hours over 7.5 weeks (i.e., 36 hours per week for a 6-credit-hour course) = 90 hours (i.e., 12 hours per week) of “direct faculty instruction” (videos and in-class time) and a minimum of 180 hours (i.e., 24 hours per week) of “out-of-class” (readings, studying, and preparation for cases) work. Note: As noted by UF policy, for each hour of “Instructor Contact,” students are expected to spend a minimum of 2 hours of additional time completing learning activities. Thus, if a week has 15 hours of Instructor Contact, the student should plan on a minimum of 30 additional hours of study. Therefore, they typical student will devote 45 hours of

effort to the course that week. The course hours estimated in this syllabus are for a “typical” student – some students will find that they will devote less time, while others will need to devote more time.

Textbooks

The following textbooks are required:

1. Foye WO, Lemke T, Williams DA. Foye’s Principles of Medicinal Chemistry, Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia, PA, 7th Edition, 2013. ISBN-13:978-1609133450; ISBN-10:1609133455
2. AccessPharmacy, McGraw-Hill Professional, New York, NY (This resource is available through the UF Health Science Center Library.) The following resources will be frequently used:
 - Brunton L. Goodman and Gilman’s The Pharmacological Basis of Therapeutics, McGraw-Hill Professional, New York, NY, 12th Edition, 2011. ISBN-13:978-0071624428; ISBN-10:0071624422 (Available in Access Pharmacy)
 - Dipiro, J, Talbert R, Yee G, Matzke G, Wells B, Posey L. Pharmacotherapy – A pathophysiologic approach. McGraw-Hill Professional, New York, NY, 9th Edition, 2014. ISBN-13:978-0071800532; ISBN-10:0071800530 (Available in Access Pharmacy)
 - Other available resources include: Multiple textbooks, Calculators, Pharmacotherapy Casebook and Care Plans, Cases, Self-Assessments and Multimedia Videos
3. Readings from the primary literature will also be assigned where appropriate.

Materials and Supplies Fees:

None

Student Evaluation & Grading

Evaluation Methods and how grades are determined

The Canvas© gradebook will be set up using the percentages below to compute the grade. The Case Studies Sessions and the Capstone will involve students working in assigned teams and collaboratively preparing for the class sessions and solving the case studies.

Assessment Item	Grade Percentage
Individual Quizzes Each Case Studies Session includes an individual quiz (N = 13)	10
Team Assessment* Each Case Studies Session includes a team quiz (N = 13)	20*

Exam #1	20
Exam #2	20
Final Exam	30
Total	100%

*Please note that team quiz points earned in this course will be reduced with an up to a 5-point deduction should your contribution to your team's effectiveness, assessed using CATME (Appendix D [peer assessment]), finds that your performance requires improvement. For example, a student earning 13 of 15 possible points for a tRAT category could see earned points drop to 8 out of the 15 possible points.

Grading Scale (The following grade scale is used across all courses)

> 92.5%	A
89.5-92.4%	A-
86.5-89.4%	B+
82.5-86.4%	B
79.5-82.4%	B-
76.5-79.4%	C+
72.5-76.4%	C
69.5-72.4%	C-
66.5-69.4%	D+
62.5-66.4%	D
59.5-62.4%	D-
< 59.4%	E

Rounding of grades: Final course grade will only be rounded up if the decimal is 0.5 or higher. The above scale depicts this policy.

Educational Technology Use

The following technology below will be used during the course and the student must have the appropriate technology and software. **Appendix A** outlines who to contact if you have questions about technology.

1. ExamSoft®
2. Canvas® Learning Management System

Class Attendance Policy

Policy Across All 1PD-3PD courses:

Class attendance is mandatory for active learning sessions such as problem-solving sessions, case discussions, and laboratory sessions. Student attendance may be excused by the Teaching Partnership Leader in the following situations: documented illness, serious family emergencies, military obligation,

severe weather conditions, religious holidays, and other reasons of serious nature. The Pharm.D. calendar allows for participation in special curricular requirements (e.g., professional meetings). Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) are excused. Conflict with work schedules is an unexcused absence.

Requests for excused absences MUST be made by an email to the Academic Coordinator and the course facilitator prior to the scheduled session or if it is an emergency situation, as soon as possible. The student is responsible for follow up and confirming whether the absence is excused or unexcused. The Teaching Partnership Leader, Academic Coordinator, and your campus specific director must be CCD in this communication. The following format is recommended:

To: Academic Coordinator and Campus Course Facilitator
CC: Teaching Partnership Leader and your specific campus director
Subject: PHA XXXX – Excused Absence request
Dear Prof. _____,
Professionally and politely request an excused absence.
Explain the nature of conflict and rationale for receiving an excused absence.
Thank the faculty member for their consideration of your special request.
Salutation,
Type in your full name and last 4 digits of UF-ID #, and Campus Name

Failing to follow this policy will render the absence not excusable. A request for an "excused absence" does not guarantee acceptance. No precedence can be drawn from any courses in the College of Pharmacy or any other college within University of Florida.

Makeup assignment(s) will be made for any excused absence(s) and will typically be submitted ***within one-week of the missed session(s)***. If the situation leads to missing multiple class sessions and makeup becomes difficult, the student and Teaching Partnership Leader will meet with the Associate Dean of Student Affairs to develop options such as a makeup/remediation plan or course withdrawal. The time period for this make up will be consistent with the UF attendance policies.

Class attendance requires full engagement of activities and discussions. The following are unacceptable during class: 1) read non-course related materials that are either in hard-copy or web-based, 2) study for other courses, 3) use a laptop for activities that are not course-related. Class participation will be reduced in such situations.

Please refer to the University Attendance Policy at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Additional Policy Specific to This Course:
None

Quiz/Exam Policy

During the Exam:

1. Students must arrive and be seated promptly to be eligible to take the exam. To maintain exam security, students who arrive late for the exam will not be allowed to start the exam if they are more

than 30 minutes late or if another student has left the room after seeing the exam. Students who have valid reasons for arriving late at the exam may request a makeup exam as outlined below.

2. No talking or other disruptive behavior during the distribution or taking of the exam.
- 3 Calculators must meet the following requirements: Only nonprogrammable calculators are allowed during exams for this course.
4. If you encounter calculator problems (e.g., dead battery), contact the Proctor.
5. Nonessential materials are NOT allowed at the student's desk during examination periods. Please leave all nonessential materials outside of or in the front of the examination room.
6. Other exam rules may be instituted during the progression of the course.
7. Once the exam commences, students may not leave the room without first turning in the exam. Once the exam is turned in, the examination period for the student is considered complete and the student must leave the examination room. If there is urgent need to use the restroom, the Proctor will provide guidance.

Failure to follow exam rules may be considered as evidence of academic dishonesty.

Policies Related to iRAT/tRAT

1. Students must bring their laptop to class in order to participate in the iRAT and tRAT.
2. Students who are late for an iRAT may begin the iRAT when arriving, but will be required to close the iRAT at the end time established for the entire class by the instructor (i.e., students who are late will not have the entire time).
3. Students may not leave the room during the iRAT and tRAT. All students must remain quiet during the testing period.
4. One comprehensive final exam will be administered at the end of course. The exam will be given simultaneously on all campuses and will include multiple choice, true/false and matching questions.

After the Exam

Policy across All 1PD-3PD courses:

1. Students are required to upload the encrypted exam file within 24 hours of completing the exam to the SofTest website.
 - a. If the encrypted file is not uploaded within 24 hours, the student's exam score will be reduced by 10%.
2. Graded exam appeals
 - a. Following release of the exam grades, the student has 3 business days to contact the Facilitator and Teaching Partner to clarify questions and appeal any possible grading errors. For courses that accept exam question appeals, see course specific information below.

Additional Policy Specific to This Course:

None

Make-up Quiz/Exam Policy

Policy across All 1PD-3PD courses:

Makeup exams are given only under special circumstances. If the student is unable to take a scheduled

examination, the Teaching Partnership Leader and Academic Coordinator must be notified before the examination or if it is an emergency situation, as soon as possible. In addition, a written letter of explanation requesting that the absence from the exam be excused, must be presented before the exam or if an emergency situation as soon as possible. An excused absence is allowable in the following situations: documented illness, serious family emergencies, military obligation, severe weather conditions, religious holidays, participation in special curricular requirements, excused absences for court-imposed legal obligations, and other reasons of serious nature. All excused absences will be considered on an individual basis by the Teaching Partnership Leader. For unusual situations (e.g., wedding that was planned before admission), the faculty member will communicate with student affairs.

The questions on the makeup exam may be in the form of essay, short answer, or multiple-choice and will be the same level of difficulty as the exam administered during the scheduled time. With the exception of highly extenuating circumstances, failure to follow the prescribed procedures or failure to attend the announced examination will result in a grade of zero for that exam. No precedence can be drawn from any courses in the College of Pharmacy or any other college within University of Florida.

The instructor will arrange an alternate deadline for the exam consistent with the University examination policies.

The student may contact the instructor to obtain details about why points were deducted. The student has two weeks following the return of the Exam to clarify any questions and appeal any possible grading errors. Any appeals on the final examination must be made in writing and submitted to your facilitator. When an appeal is made to re-grade an Exam, the entire Exam will be reevaluated and scored.

Additional Policy Specific to this Course:

None.

Policy on Old Quizzes and Assignments

Old quizzes and assignments are not provided.

General College of Pharmacy Course Policies

The following policies apply to all courses in the College of Pharmacy and are available on the COP website:

University Grading Policies

Please visit the following URL to understand how the University uses the course grade to compute your overall GPA: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Concerns, Appeals, and Complaints

Students who have concerns about their evaluation of performance and/or student-faculty relations should review the Student-Faculty Handbook for guidance. The Student-Faculty Handbook also outlines the chain of command for any appeals and/or complaints.

Academic Integrity Policy

Students are expected to act in accordance with the University of Florida policy on academic integrity (<http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php>). This Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult the course's Teaching Partnership Leader.

Students are also expected to abide by the UF Honor Code.

The following is the UF Honor Pledge: *We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code.*

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

Psychomotor and Learning Expectations

Psychomotor expectations relate to the ability to meet the physical demands of the pharmacy curriculum. Physically impaired students and students with learning disabilities such as hearing impairment, visual impairment, dyslexia or other specific learning disabilities such as sensory deficit or sensory-motor coordination problems should cooperate with the faculty and staff in addressing these problems in order to meet academic standards.

How to Request Learning Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to both the instructor and the academic coordinator when requesting accommodations. Students at all campuses are also expected to provide a copy of the letter of accommodations to the Office of Student Affairs in Gainesville since some learning activities/exams/assessments require their assistance.

- Students with disabilities should follow this procedure as early as possible in the semester. It is strongly recommended that the procedure be done before the course starts so there is sufficient time to arrange accommodations and so that all learning activities/exams/assessments for the course are arranged.
- Please note that you must arrange for accommodations in advance; grades cannot be retroactively changed.

Faculty and Course Evaluations

Students are expected to provide feedback on the quality of instruction in every course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu> . Evaluations are typically open around mid-semester and need to be completed by the established deadline. Summary results of these assessments are available to students at <https://evaluations.ufl.edu> .

Computer and Other Technology Requirements

Students are required to meet the following computer and technology requirements:

<http://pharmacy.ufl.edu/education/student-affairs/admissions/student-computer-requirements/>

ExamSoft® is used for administration of exams and students are required to follow the procedures that are established for exam administration. Students must bring a laptop to class to complete exams and this laptop must meet the computer and technology requirements established by the College. These technology requirements require a backup battery with at least 2 hours of life. Students must also complete mock exams prior to the actual exam to assure that all computer features are supported by ExamSoft®.

Expectations In Class and Other Learning Activities

Students are expected to:

- Be diligent and timely in studying the course material.
- Be on time for class sessions, quizzes, and exams.
- Be prepared for group discussions and conference calls.
- Do your own work.
- Actively collaborate with peers when assigned to groups.
- Inform the course coordinator about an absence from an exam or other assigned class activity at least 24 hours prior to the event.
- Dress appropriately for class sessions or clinically related activities.
- Turn off cell phones and other electronic communication devices during a class session or phone conference.
- Be quiet during class sessions including peer presentations.
- Be focused and avoid distractive behaviors in class.
- Appropriately use the computer in class, i.e., do not be looking at unrelated information on the web site during class.
- Participate in class or group discussions.
- Raise one's hand to be recognized before making a comment during a class session.
- Be respectful to the teacher.
- Be respectful to fellow students in discussions.
- Be courteous, respectful, and civil when using discussion boards.
- Focus on the course learning activities; it is not respectful to study for other coursework during the class session.
- Address faculty with the appropriate title and name, i.e., Dr. (last name) or Professor (last name).
- Address concerns about performance or course material directly with the course coordinator, facilitator, or teaching assistant.
- Seek assistance with academic or personal difficulties as soon as possible.

Communications

Course-related Communications

Students with questions about course content should post questions on the discussion board. Questions that are personal in nature (illness, emergencies, excused absence request, request for accommodations) should email the course teaching partnership leader and copy the Academic Coordinator and Distant Campus Dean. The student may email the course leader for any other needs that are personal in nature.

Faculty member Response Time:

1. The Course Coordinators/instructors will work to respond to postings within 24 hours of the posting between Monday and Friday 12N. Responses on weekends and holidays will be sporadic. (On weekends when assignments are due, students are advised to post questions before 12 Noon on Friday.)

Email Communications:

1. When communicating with faculty via email, the subject line needs to include the course number & title.
2. At the end of the email, in addition to listing your name, list your academic year and campus/site.

Discussion Board Policy

The purpose of the discussion board is to provide a venue for you to enhance your learning. This is accomplished by having a thread for each module where you can post questions to the course coordinators. (A thread is a single link that is devoted to a topic.) The discussion board is also a place where your instructors may post virtual cases for you to work up.

Such interaction on the discussion boards with the instructors will allow you to clarify your questions and apply what you are learning in other parts of the course. The goal of these discussions is to help you learn.

Students Netiquette on the Discussion Board:

1. Post your comment on the correct discussion thread. If you have a question about A1 (Unit A - Module 1), post it in the discussion thread for A1 and not the B1 thread.
2. The discussion board is not a place to complain. Complaints should instead be directed directly to the instructor via email. This allows the primary course coordinator to quickly address your concern without causing distraction to other students who have limited time and want to focus on learning.
3. Use "netiquette." If you have never learned "netiquette" - please visit the following URL: <http://www.albion.com/netiquette/corerules.html> If you follow the rules of netiquette described in this URL, you will avoid posting an embarrassing or inappropriate comment.
4. The discussion board has been designed to allow you a place to ask further questions on the material to clarify any confusion, gain a deeper understanding of the material, or ask general course questions. A question you might see on a discussion board is "What do I need to study for the exam?" Please reflect on how this question can be perceived by your lecturing faculty as well as your fellow classmates. Rewording the question to address a specific topic would be more appropriate. For example, "Dr. XX, you listed numerous side effects for drug XX on slide XX. Of those, what are the most relevant that we could expect to occur and monitor for in clinical practice." The type of material that is covered in these classes is material that is important for patient care. All of this material is important. There are variations in courses,

but please make use of your syllabus since there might be guidance on how to prepare for various exams in your classes.

5. In most situations, lectures are released as planned by the course coordinators. Clarifying at the beginning of a semester on the planned release date/time, if not posted in the syllabus, is appropriate. Continual posts on the discussion board on weekly basis can become overwhelming for the course coordinator as well as your fellow students.

Question/Answer sessions in live class sessions:

Time is usually reserved at the end of the class for questions regarding the material to clear up any confusion or expand on material covered in the particular section. This is a valuable time for all students and since time is limited, the questions should focus on the topics at hand. Questions such as, "What material will be covered on an upcoming exam?" or, "Do we need to know dosing for the exam?" are inappropriate during this time period. In our profession, all material is important. However, if this question does need to be asked, please consider using the discussion board to clarify any specific exam questions.

Student Complaint Process

Concerns about the course (e.g., course requirements, quizzes, exams) should first be discussed with the appropriate course instructor and the Teaching Partnership Leader. If a satisfactory resolution is not achieved, the student may appeal to the Associate Dean for Curricular Affairs and Accreditation who will also engage other individuals depending on the request (e.g., campus dean, department chair, Associate Dean for Student Affairs). If the student finds the decision unsatisfactory, the student may appeal to the Dean of the College of Pharmacy. If this decision is unsatisfactory, the student may appeal to the Ombuds office (https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf).

Religious Holidays

Please see the University policy on attendance and religious holidays:

<http://www.registrar.ufl.edu/catalog/policies/regulationattendance.html#religious>.

Counseling and Wellness Center

Students who are experiencing issues and events that could adversely affect academic performance and personal health should be encouraged to meet with the course coordinator or facilitator or appropriate administrator for guidance. Students in the Gainesville area may contact the UF Counseling and Wellness Center for Gainesville students (352-392-1575; <http://www.counseling.ufl.edu>). Students outside the Gainesville area may obtain similar contact information from the campus/program administrator.

Emergencies

Call the University Police Department for emergencies: 392-1111 or 9-1-1

Student Crisis

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-

1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Students who are experiencing issues and events are also encouraged to contact their local crisis center. For Alachua County the Crisis Center number is 352-264-6789; for Jacksonville and Duval County 904-632-0600 and toll free for Northeast Florida at 1-800-346-6185; and for Orlando 407-425-2624.

The following national call numbers are also available for students who reside outside of the main COP campuses: a) 1-800-273-8255, and b) 1-800-784-2433.

How to Access Services for Student Success

Students who need guidance for course success or who are having academic difficulty should contact their advisor/facilitator or Campus Director/Senior Associate Dean for assistance.

Faculty Lectures/Presentations Download Policy

Photography, Audio-visual recording, and transmission/distribution of classroom lectures and discussions is prohibited unless there is expressed written permission. Recorded lectures and class sessions are authorized solely for the purpose of individual or group study with other UF College of Pharmacy students enrolled in the same class. Such recordings may not be reproduced, shared, or uploaded to publicly accessible web environments. Students who do not adhere to this policy will be considered to be breaching COP copyrights and/or FERPA law.

Please see the following URL for COP Policies:

<http://file.cop.ufl.edu/studaff/policies/General%20COP%20Course%20Policies.pdf>

Appendix A. Faculty and Staff: Who to Contact

Academic Coordinator:

1. Questions about dates, deadlines, meeting place
2. Availability of handouts and other course materials
3. Assignment directions
4. Questions about grade entries gradebook (missing grades, wrong grade)
5. Assistance with ExamSoft®

Teaching Partnership Leaders

1. Issues related to course policies (absences, make up exams, missed attendance)
2. Questions about grades
3. Concerns about performance
4. Guidance when there are performance problems (failing grades)
5. General questions about content

Other Teaching Partnership Faculty Members

1. Questions about specific content

Technical Support:

Contact the College of Pharmacy MediaHelp Desk for assistance with course-related technical issues (e.g., Canvas access, video access, printing of documents). The MediaHelp Desk may be reached via the following:

Phone: 352-273-6281 (9am-4PM ET)

Email: mediahelp@cop.ufl.edu (response is delayed outside of M-F 9AM-4PM ET)

Contact the University of Florida Computing Help Desk for addresses issues related to:

1. Gatorlink accounts,
2. Gatorlink email,
3. myUFL, and
4. ISIS.

Phone: (352)-392-4357

Appendix B. Teaching Partners

Name	Email	Phone
Jane Aldrich, Ph.D.	jaldrich@cop.ufl.edu	352-273-8708
William Allen, J.D., M.Div.	wmallen@ufl.edu	352-273-5155
Sihem Bihorel, Ph.D., Pharm.D., M.S.	sihem.bihorel@ufl.edu	407-313-7037
Lori Dupree, Pharm.D.	Ldupree@cop.ufl.edu	904-244-9590
Hartmut Derendorf, Ph.D.	Hartmut@cop.ufl.edu	352-273-7856
Carinda Feild, Pharm.D.	cfeild@cop.ufl.edu	727-294-6213
Reggie Frye, Pharm.D., Ph.D.	frye@cop.ufl.edu	352-273-5453
Robert Huigens, Ph.D.	rwhuigens@cop.ufl.edu	352-273-7718
Eric Krause, Ph.D.	ekrause@cop.ufl.edu	352-273-6977
Margaret James, Ph.D.	mojames@cop.ufl.edu	352-273-7707
Jackie Jourjy, Pharm.D.	jjourjy@cop.ufl.edu	407-313-7006
Lindsey Childs-Kean, Pharm.D.	lchilds-kean@cop.ufl.edu	727-394-6213
Ken Klinker, Pharm.D.	klinkkp@cop.ufl.edu	352-265-0111 ext. 45892
Shannon Miller, Pharm.D.	smiller@cop.ufl.edu	407-313-7031
Carol Motycka, Pharm.D.	motycka@cop.ufl.edu	904-244-9590
Joanna Peris, Ph.D.	peris@cop.ufl.edu	352-273-7688
Teresa Roane, Pharm.D.	troane@cop.ufl.edu	352-273-9692
Anzeela Schentrup, Pharm.D., Ph.D.	shena@shands.ufl.edu	352-265-8309
Veena Venugopalan, Pharm.D.	VVenugopalan@cop.ufl.edu	252-273-6217
Katie Vogel-Anderson, Pharm.D.	vanderson@cop.ufl.edu	352-273-6413
Stacy Voils, Pharm.D., M.S.	svoils@cop.ufl.edu	352-294-5276
Kristen Weitzel, Pharm.D.	kweitzel@cop.ufl.edu	352-273-5114
Karen Whalen, Pharm.D.	whalen@cop.ufl.edu	352-273-9497
Almut Winterstein, Ph.D.	almut@cop.ufl.edu	352-273-6258

Appendix C. Student Guide for Case Studies

Students are accountable for recalling and applying content learned in all prior courses.

Case studies will also require application of one or more of the following Transcending Concepts:

- | | | |
|--|--|--|
| <input type="checkbox"/> Evidence-based practice | <input type="checkbox"/> Informatics | <input type="checkbox"/> Problem solving |
| <input type="checkbox"/> Social considerations | <input type="checkbox"/> Behavioral considerations | <input type="checkbox"/> Communications |
| <input type="checkbox"/> Law and ethics | <input type="checkbox"/> Health-wellness | <input type="checkbox"/> Drug delivery systems |
| <input type="checkbox"/> Pharmacokinetics | <input type="checkbox"/> Personalized medicine | <input type="checkbox"/> Special populations |
| <input type="checkbox"/> Self-care | <input type="checkbox"/> Interprofessional collaboration | <input type="checkbox"/> Medication safety |
| <input type="checkbox"/> Pharmacoeconomics | <input type="checkbox"/> Population-based care | |

COLLECT (SO: Subjective and Objective Data)

Students/teams must be able to gather subjective and objective information about the patient in order to understand the relevant medical and medication history and clinical status of the patient. Data are collected by simulated patient interview, medical record review, pharmacy profile review, and/or communication with other members of the healthcare team. Physiological, psychological, and sociological variables are expected to be considered.

2. Patient Name:
3. Main Disease Focus:
4. Type of Encounter/Setting [new patient, established, ED, hospital, clinic, refill, etc]:
5. Opening Statement from the Patient:
6. If patient is “unavailable” identify who represents the patient:
7. Age:
8. Gender:
9. Marital Status:
10. Height/Weight:
11. Socioeconomic Status:
12. Language:
13. Appearance:
14. Dress:
15. Other Family Members:
16. Patient History [What has been happening?]:
17. Chief Complaint(s):
18. Symptoms:

-
19. Characteristics:
 20. History/Onset/Acuity/Severity/Progression/Location/Aggravating Factors/Relieving Factors:
 21. Actual/Feasible Diagnoses:
 22. Current Medical Problems:
 23. Relevant Past Medical History:
 24. Medication List [Name, strength, dose, interval, duration, indication [if known], persistence, adherence]:
 - a. -From Patient
 - b. -From Pharmacies
 - c. -From Primary Care Physician
 - d. -From Specialty Physicians/Hospitalization/ED/Clinic
 - e. -Nonprescription
 - f. -Dietary Supplements
 25. Reasons for nonpersistence or adherence:
 26. Information that the patient gives about their medications:
 27. Immunization History:
 28. Smoking History:
 29. Alcohol Use/History:
 30. Caffeine Intake:
 31. Illicit Drug Use:
 32. Sleep Habits:
 33. Pertinent Laboratory Findings:
 34. Pertinent Vital Signs:
 35. Pertinent Physical Exam Findings:
 36. Other Diagnostic Tests:
 37. Allergies [include rationale]:
 38. Intolerance [include history]:
 39. Patient's Affect:
 40. Patient's Attitude/Agenda:
 41. Patient Mannerisms/Nonverbal Behaviors:

Students/teams will also be expected to ask questions during case discussions or simulated patient encounters to gather information not readily available in the chart/written case document.

ASSESS (*A: Assessment; Ask Clinical Questions; Acquire the Best Evidence; and Appraise*)

Students/teams will be expected to assess the information collected and the clinical effects of the patient's therapy in the context of the patient's overall health goals in order to identify and prioritize problems and achieve optimal care.

1. This evaluation will require:
 - i. understanding, explaining, and assessing the patient's health status;
 - ii. interpretation of physical and patient assessments;
 - iii. assessment of each medication for appropriateness, effectiveness, safety, economics, persistence, and adherence;
 - iv. assessment of health and functional status, risk factors, health data, cultural factors, health literacy, access to medications, and other aspects of care;
 - v. assessment of immunization status and need for preventative care;
 - vi. integration of knowledge, clinical experience, and patient data to formulate and test hypotheses about the etiology of medication-related problems; and,
 - vii. identification of potential and actual medication-related problems.

Students/teams will also be expected to accomplish the following:

1. Outline a list of Drug-related Problems.
2. Explain Each Basic Science Concept Emphasized:
 - a. **Pathophysiology:**
 - i. Describe the pathophysiology of disease state(s) and identify appropriate drug targets (cellular/molecular), biochemical processes, and organ changes for therapeutic intervention.
 - ii. Specifically, for a given disease state: describe the basic pathophysiology of the disease including an explanation of the abnormal processes and the resulting disease signs and symptoms; outline risk factors and/or diagnostic indicators (e.g., lab values, diagnostic test results); and, determine classes of drugs that will treat the disease state and ameliorate the underlying pathophysiology and signs/symptoms.
 - b. **Pharmacology:**
 - i. Compare and contrast the therapeutic and adverse effects of drug classes that are appropriate for treating the disease state.
 - ii. Describe major pathways for metabolism and the pharmacological consequences of metabolism.
 - iii. Identify the most common/serious drug interactions and adverse effects. Identify important precautions and contraindications.
 - iv. Compare and contrast the therapeutic and adverse effects of drugs within a given class.
 - v. Discuss significant pharmacodynamic considerations.
 - c. **Medicinal Chemistry:**

-
- i. Apply knowledge about structure-activity relationships and cellular/molecular mechanisms of action to identify drug classes that are appropriate for treatment of the disease state.
 - ii. Specifically, for each drug class: Identify the relevant therapeutic targets and explain the mechanism(s) of action.
- d. Pharmaceuticals:**
- i. Recommend any unique storage, handling, or use requirements to ensure patient safety and clinical efficacy.
 - ii. Discuss significant pharmacokinetic considerations (e.g., effect of food of absorption, influence of route of administration on onset, dose, elimination, etc).
3. Explain Each Transcending Concept Emphasized in this Case:
 4. Discuss Drug Information Questions/PICOT Statements Relevant to this Case and accurate/complete responses for each question:
 - a. Patient-Population-Problem/Intervention/Comparison/Outcomes/Time Frame
 5. Summarize the Best Evidence for Each Problem/Question:
 - a. -Search Strategy
 - b. -Guidelines
 - c. -Landmark Clinical Trials
 - d. -Best Available Evidence [with Limitations]
 6. Identify important Literature Appraisal Issues.

PLAN (P: Plan)

Students/teams will be expected to develop an individualized **patient-centered** care plan in collaboration with the patient [and/or their caregiver], other healthcare professionals, and other interested parties.

1. Specific and General Therapeutic Goals
 - a. Consider clinical outcomes in the context of the patient's overall health and access to care
2. Therapeutic Plan
 - a. Develop an individualized patient-centered plan in collaboration with the patient, caregiver, in collaboration with other healthcare professionals, and other interested parties.
 - i. Therapeutic Alternatives: Evaluate alternatives for the patient before establishing the plan
 - ii. Develop the Therapeutic Plan:
 1. Address medication-related problems and optimizes therapy considering the goals and desires of the patient;

-
2. application of established guidelines, evidence-based medicine, and population-based treatment plans;
 3. accurate and patient-specific dosing (including dosage adjustment for renal/hepatic dysfunction, starting dose, maximum doses, timing of doses, effects of food on absorption, route of administration, and pharmacokinetic design for narrow therapeutic index drugs;
 4. parameters for monitoring response and frequency of monitoring;
 5. parameters for monitoring adverse effects and frequency of monitoring;
 6. plan for patient counseling/education;
 7. plan for patient counseling/education; and
 8. Considerations for care continuity, including follow-up and transitions of care as appropriate.
3. Patient/Caregiver Engagement: Involve the patient through education, empowerment, and self-management

IMPLEMENT (Apply)

Students/teams will be expected to implement the care plan in a simulated situation that requires collaboration with the patient/caregiver, other healthcare professionals, and other interested parties.

1. When implementing the care plan, the following are to be accomplished:
 - a. medication and health-related problems are addressed;
 - b. preventative care including vaccine administration are provided;
 - c. medication therapy is initiated, modified, discontinued, or administered as authorized;
 - d. education and self-management training is provided to the patient/caregiver;
 - e. refers and provides transitions of care as needed;
 - f. barriers are identified and addressed, when possible; and, schedules follow-up care as needed to achieve goals of therapy.

FOLLOW-UP, MONITOR, & EVALUATE

Students/teams are expected to monitor and evaluate the effectiveness of their care plan and modify the plan in collaboration with other health care professionals and the patient/care giver.

1. The following are continually monitored and evaluated:
 - a. medication appropriateness, effectiveness, and safety and patient adherence through available data, biometric test results and patient feedback;
 - b. clinical endpoints that contribute to the patient's overall health; and, outcomes of care, including progress toward or achievement of goals.
2. Specific Recommendations for Follow-up and Monitoring
3. List of Quality Improvement Outcomes
 - a. Process Measures
 - b. Clinical Outcomes

COLLABORATE

Students/teams will be expected to role plan collaborating with patients, caregivers, other healthcare providers, and interested parties when taking care of patients.

COMMUNICATE

Student/teams will be expected to succinctly communicate with patients/caregivers, other healthcare team members, and other interested parties (policy makers, employers, insurance companies, payers) throughout the patient care process.

Examples of typical communications are:

1. Important Communication Points and Methods for Data Collection
2. Important Communication Points for Assessment
3. Collaborate with Team Members: Specific therapeutic approaches for individual patients based on scientifically and logically validated assessment of the patient's health care needs and an ethical consideration of the patient's health care goals and desires
4. Communicate the Assessment and Plan via Face-to-face, Telephone, and/or Written documentation
5. Communicate Benefits, Risks, Economics, & Other Factors to:
 - a. Patient/Family
 - b. Prescribers
 - c. Policy Makers
 - d. Payers (Insurance Companies, PBMs, Employers, and/or Hospitals)

DOCUMENT

Students/teams will be expected to create written patient care notes (SOAP notes, intervention notes, consultation notes) using the standardized formats learned in prior classes and this course.

1. SOAP notes are expected to include the following elements
 - a. Subjective
 - i. Clear
 - ii. Complete Pertinent Information
 - iii. Only Pertinent Information
 - b. Objective
 - i. Verified Medication List
 - ii. Clear
 - iii. Complete Pertinent Information
 - iv. Only Pertinent Information
 - c. Assessment
 - i. Complete and Prioritized List of Medication-related Problems
 - ii. Therapeutic Goals
 1. Alternatives are Accurately Presented

-
- iii. Findings Synthesized with Enough Depth to Explain but are a Concise Assessment
 - iv. Clear Positions
 - d. Plan
 - i. Pertinent Plan with Necessary Instructions
 - ii. Balances Benefits, Risks, and Costs
 - iii. Education and Follow-up is Collaborative and Considers Systems
 - iv. Specific Monitoring Plan
 - 2. Responses to Drug Information Questions in the PICOT Format with Summary of the Evidence
 - a. Limitations of the Evidence Stated

Appendix D. Comprehensive Assessment of Team Member Effectiveness (CATME)

This web-based instrument collects data on team member effectiveness in five areas research has shown to be important.

1. Contributing to the team's work
2. Interacting with teammates
3. Keeping the team on track
4. Expecting quality
5. Having relevant knowledge skills and abilities.

The CATME Peer Evaluation instrument is a behaviorally anchored rating scale that describes behaviors typical of various levels of performance in each of the above five categories. Raters select the category of behaviors that most closely matches the behavior of each student on their team (including themselves). The CATME website shows the instrument and allows faculty and students to practice using the system by rating fictitious team members.

A special feature is helping professors understand what is happening in student teams. The system alerts faculty to exceptional conditions that are rating patterns that warrant attention.

- Low—a student who rates him/herself as ineffective and who also receives “ineffective” ratings by teammates.
- Overconfident—a student rated as “ineffective” by teammates but rates him/herself as much more effective.
- High—a student who is rated as highly effective according to both teammate and self ratings.
- Underconfident—a student rated as highly effective by teammates but who under-rates her/himself.
- Manipulator—a student who rates him/herself as highly effective and who rates teammates as ineffective in disagreement with teammates. Such a student may be trying to influence the distribution of grades unfairly.
- Conflict—a team in which there is considerable disagreement among the various raters about the effectiveness of an individual student.
- Clique—a team in which cliques appear to have formed. The ratings show that subsets of the team rate members of their subset high and members of other subsets low.

Some of these conditions have more than one explanation. A student flagged as a “manipulator” might actually have performed a disproportionately large amount of the work on the project even though they worked to engage their teammates in the process. Thus, an instructor's involvement and judgment are critical when exceptional conditions are flagged. Though the formal study of these exceptions has not been completed, faculty using the system have reported that both the clique and conflict conditions have accurately provided early warnings of those condition

Comprehensive Assessment of Team Member Effectiveness—Behaviorally Anchored Rating Scale (BARS) Version

Your name						<p>← Write the names of the people on your team including your own name.</p> <p><u>This self and peer evaluation asks about how you and each of your teammates contributed to the team during the time period you are evaluating. For each way of contributing, please read the behaviors that describe a "1", "3," and "5" rating. Then confidentially rate yourself and your teammates.</u></p>
Contributing to the Team's Work	5	5	5	5	5	<ul style="list-style-type: none"> Does more or higher-quality work than expected. Makes important contributions that improve the team's work. Helps to complete the work of teammates who are having difficulty.
	4	4	4	4	4	Demonstrates behaviors described in both 3 and 5.
	3	3	3	3	3	<ul style="list-style-type: none"> Completes a fair share of the team's work with acceptable quality. Keeps commitments and completes assignments on time. Fills in for teammates when it is easy or important.
	2	2	2	2	2	Demonstrates behaviors described in both 1 and 3.
	1	1	1	1	1	<ul style="list-style-type: none"> Does not do a fair share of the team's work. Delivers sloppy or incomplete work. Misses deadlines. Is late, unprepared, or absent for team meetings. Does not assist teammates. Quits if the work becomes difficult.
Interacting with Teammates	5	5	5	5	5	<ul style="list-style-type: none"> Asks for and shows an interest in teammates' ideas and contributions. Improves communication among teammates. Provides encouragement or enthusiasm to the team. Asks teammates for feedback and uses their suggestions to improve.
	4	4	4	4	4	Demonstrates behaviors described in both 3 and 5.
	3	3	3	3	3	<ul style="list-style-type: none"> Listens to teammates and respects their contributions. Communicates clearly. Shares information with teammates. Participates fully in team activities. Respects and responds to feedback from teammates.
	2	2	2	2	2	Demonstrates behaviors described in both 1 and 3.
	1	1	1	1	1	<ul style="list-style-type: none"> Interrupts, ignores, bosses, or makes fun of teammates. Takes actions that affect teammates without their input. Does not share information. Complains, makes excuses, or does not interact with teammates. Accepts no help or advice.
Keeping the Team on Track	5	5	5	5	5	<ul style="list-style-type: none"> Watches conditions affecting the team and monitors the team's progress. Makes sure that teammates are making appropriate progress. Gives teammates specific, timely, and constructive feedback.
	4	4	4	4	4	Demonstrates behaviors described in both 3 and 5.
	3	3	3	3	3	<ul style="list-style-type: none"> Notifies changes that influence the team's success. Knows what everyone on the team should be doing and notices problems. Alerts teammates or suggests solutions when the team's success is threatened.
	2	2	2	2	2	Demonstrates behaviors described in both 1 and 3.
	1	1	1	1	1	<ul style="list-style-type: none"> Is unaware of whether the team is meeting its goals. Does not pay attention to teammates' progress. Avoids discussing team problems, even when they are obvious.
Expecting Quality	5	5	5	5	5	<ul style="list-style-type: none"> Motivates the team to do excellent work. Cares that the team does outstanding work, even if there is no additional reward. Believes that the team can do excellent work.
	4	4	4	4	4	Demonstrates behaviors described in both 3 and 5.
	3	3	3	3	3	<ul style="list-style-type: none"> Encourages the team to do good work that meets all requirements. Wants the team to perform well enough to earn all available rewards. Believes that the team can fully meet its responsibilities.
	2	2	2	2	2	Demonstrates behaviors described in both 1 and 3.
	1	1	1	1	1	<ul style="list-style-type: none"> Satisfied even if the team does not meet assigned standards. Wants the team to avoid work, even if it hurts the team. Doubts that the team can meet its requirements.
Having Relevant Knowledge, Skills, and Abilities	5	5	5	5	5	<ul style="list-style-type: none"> Demonstrates the knowledge, skills, and abilities to do excellent work. Acquires new knowledge or skills to improve the team's performance. Able to perform the role of any team member if necessary.
	4	4	4	4	4	Demonstrates behaviors described in both 3 and 5.
	3	3	3	3	3	<ul style="list-style-type: none"> Has sufficient knowledge, skills, and abilities to contribute to the team's work. Acquires knowledge or skills needed to meet requirements. Able to perform some of the tasks normally done by other team members.
	2	2	2	2	2	Demonstrates behaviors described in both 1 and 3.
	1	1	1	1	1	<ul style="list-style-type: none"> Missing basic qualifications needed to be a member of the team. Unable or unwilling to develop knowledge or skills to contribute to the team. Unable to perform any of the duties of other team members.

For further information on the design of the CATME Peer Evaluation instrument, research supporting its use, or to request an account, go to www.CATME.org. The instrument is copyrighted. CATME Peer Evaluation is part of the CATME SMARTER Teamwork system, which includes other team-support tools. The CATME online interface was developed by Deer Run Associates. This material is based upon work supported by NSF Awards 0243254 and 0817403.

Response to Lindner Inquiry 4-8-16

PHA 5784C: Patient Care 4: Gastrointestinal & Renal Disorders [CA]

1. <http://apps.aa.ufl.edu/Approval/Requests/Info/10860>

Committee Comments:

- Please clarify the contact hours for the course and credit hours for course. There may be an issue in regards to UF policy.

In all of the Patient Care courses, the instructor contact time includes:

1. **Video Lectures** (Pharmacology, Medicinal Chemistry, Management of a disorder, etc) These are traditional lectures that are available via video so that students may learn outside the classroom and re-watch the lectures as needed to learn concepts/memorize material for recall and recitation.
2. **Case Study discussions** which are done in a brick and mortar classroom. These involve active learning. There is typically a quiz at the beginning of the session so that students are accountable for completing the video lectures before coming to a case study session.
3. **Exams:** All exams are administered via ExamSoft®. The exams are taken in a brick and mortar classroom. Before coming to class, students download an encrypted file on their laptop. At the start of the exam, the instructor provides a passcode that allows the student to open the file and take the exam. Upon leaving the exam, the instructor verifies the student has closed the file. The student then uploads the encrypted file when they leave the classroom. (Most HSC Colleges and the Law School are using ExamSoft)

All of these are considered instructor contact time. Lectures count like traditional course lectures. The case studies involve some small group work that is completed with the instructor in the room. Therefore, the contact hour calculation for these considers that 2 hours of case discussion = 1 hour of traditional contact time. (This is the reason this is a C course.)

Our assumption is that because these activities are similar to a traditional classroom, the student spends 2 hours of outside time for each 1 hour of instructor contact time.

Outside Study Includes:

1. **Re-watch video-lectures and/or stop and restart videos.** This allows the student to comprehend the information and clarify learning of material.

2. **Read assigned textbook chapters, journal articles, and other medical literature containing the content discussed in the video-lectures.** These readings allow for reinforcement of information provided in the video-lectures.
3. **Self-assessments.** A self-assessment allows the student to determine comprehension of course content. The instructor does not monitor whether the student completes the assessment and therefore, it is an ungraded activity.
4. **Discussion board review/readings.** There is a discussion board in the course that allows for student:student and student:instructor interaction. Understanding of course material can be discussed asynchronously. Students may also ask general questions about the course.
5. **Individual study to prepare for quizzes/exams.**
6. **Individual study to review notes and materials following a class session.**

This course equates to approximately 1 credit hour of work per week. To accomplish this, the student is expected to spend 15 hours completing “instructor directed learning” and 30 hours of “outside learning.” This total is 45 hours per week. This information is also denoted in each of our syllabi.

We recently conducted a survey and our students indicated an understanding that they are expected to complete this outside study.

- Uses language in the Quiz/Exam Policy common to other 5000 level PHA courses.
 - There is confusion regarding how the examinations are administered. Is the exam a sit-down exam (During the Exam) that must be uploaded within 24 hours (After the Exam)? Please clarify the nature of the examinations.

See above about use of Examsoft. Students complete the exam in a brick and mortar classroom. But, the encrypted file is uploaded to Examsoft website after they leave the classroom. (This approach prevents issues if there are broadband issues during the exam.)

- Please bring course make-up policy in line with UF Attendance/makeup Policy:
 1. Requirements for class attendance and make-up exams, assignments, and other work are consistent with university policies that can be found at:
<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

We believe the policy is consistent with UF policy. We encourage students to complete any make up within 1 week because our blocks are

shorter than a semester. (eg, 1 week to 10 weeks in length). This is done because of our block model and that the upcoming courses often require successful completion of prior courses. (Our co-requisite statement provides flexibility in these pre-requisites if a student has illnesses, etc.) However, if students need more time, this is accommodated.

Below is our statement. If students need extended time for makeup, we have them meet with the course instructor (Teaching Partnership Leader” and the Associate Dean for Student Affairs to determine how to make up the missed sessions.

As noted below – we include the UF policy statement.

Makeup assignment(s) will be made for any excused absence(s) and will typically be submitted ***within one-week of the missed session(s)***. If the situation leads to missing multiple class sessions and makeup becomes difficult, the student and Teaching Partnership Leader will meet with the Associate Dean of Student Affairs to develop options such as a makeup/remediation plan or course withdrawal. The time period for this make up will be consistent with the UF attendance policies.

Class attendance requires full engagement of activities and discussions. The following are unacceptable during class: 1) read non-course related materials that are either in hard-copy or web-based, 2) study for other courses, 3) use a laptop for activities that are not course-related. Class participation will be reduced in such situations.

Please refer to the University Attendance Policy at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

2. If students have an excused absence UF policy allows them to make-up exams/work.

Content Hour Map

Course: PHA5784C Patient Care 4: Gastrointestinal & Renal Disorders

***Case Studies and Capstone Sessions are active learning sessions that allow for application of other coursework. Since part of the time involves interaction with team members rather than faculty members, a 2.0 hr contact time is equivalent to 1.0 hr of instructor contact time.**

****Transcending concepts provide content that will be applied during the Case Studies.**

<i>Date Recommended Dates for Viewing Videos</i>	Module and Unit	Unit Topic Learning Resources will include Lecture Videos and readings.	Instructor Contact Hours ^a	Outside Study	Relationship to Course Grading	Faculty
	Module 1: Introduction to the Gastrointestinal System (Approximately 10 hours of direct instruction & 20 hours out of class; total = 30 hr) Pharmacology: Karen Whalen Medicinal Chemistry: Margaret James PTR: Karen Whalen & Reggie Frye					
Jan 13 (F)	1A	Video-Lecture: Pathophysiology of the GI System	1.5	3 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Whalen & Frye

Jan 13 (F)	1B	Video-Lecture: Pharmacology of GI Drugs	2	4 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Whalen
Jan 13 (F)	1C	Video-Lecture: Medicinal Chemistry of GI Drugs	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	James
Jan 18 (W)	Thru 1C	Case Studies: GI Disease (includes individual and team quizzes)	2 (4 workup)	4 (Prep for quiz and case)	2 Quizzes at start of class assess knowledge from video-lectures from individual/online study. Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	Frye, James, Whalen

Jan 18 (W)	1E	Video-Lecture: Management of Peptic Ulcer Disease	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Whalen
Jan 18 (W)	10A	Video-Lecture: Transcending Concept: Evidence-Based Practice-- Meta-analyses of safety and efficacy studies (assessment of heterogeneity and publication bias, fixed and random effects models)	0.5	1 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Hatton
Jan 18 (W)	1F	Video-Lecture: Transcending Concept: Self Care—GERD (re-enforce Patient Care 1)	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Whalen
Jan 19 (Th)	Thru 1F	Case Studies: Ulcers (includes individual and team quizzes)	2 (4 workup)	4 (Prep for quiz and case)	2 Quizzes at start of class assess knowledge from video-lectures from individual/online study.	Frye, James, & Whalen

					Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	
		<p>Module 2: Common Gastrointestinal Complaints and Inflammatory Bowel Disease (Approximately 17.5 hours of direct instruction & 35 hours out of class; total = 52.5 hr)</p> <p>Pharmacology: TBD</p> <p>Medicinal Chemistry: Jane Aldrich</p> <p>PTR: Karen Whalen</p>				
Jan 20 (F)	2A	<p>Video-Lecture: Pharmacology of GI Drugs: Bismuth Subsalicylate, Loperamide, Diphenoxylate, Bulk-forming Agents, Emollients</p>	1.5	3 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Whalen
Jan 20 (F)	2B	<p>Video-Lecture: Medicinal Chemistry of GI Drugs: Bismuth Subsalicylate, Loperamide, Diphenoxylate, Bulk-forming Agents,</p>	1	2 (Allows for re-watch of video-lectures and textbook/journal	Knowledge assessed by individual and team quizzes (in class)	Aldrich

		Emollients		readings with the same content.)	just prior to the case study.	
Jan 20 (F)	2C	Video-Lecture: Management of Nausea & Vomiting—including Self-care	2	4 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Motycka & Weitzel
Jan 20 (F)	2D	Video-Lecture: Management of Diarrhea, Constipation, Irritable Bowel Syndrome—including Self-care	1.5	3 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Motycka & Weitzel
Jan 20 (F)	2E	Video-Lecture: Management of Diverticulosis	0.5	1 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	TBD
Jan 20 (F)	2F	Video-Lecture: Transcending Concept: Behavioral—Stress	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Miller

Jan 23 (M)	Thru 2F	Case Studies: Common GI Complaints (includes individual and team quizzes)	2 (4 workup)		2 Quizzes at start of class assess knowledge from video-lectures from individual/online study. Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	Aldrich, Miller, Motycka, Weitzel, Whalen, & TBD
Jan 25 (W)	2G	Video-Lecture: Pharmacology of Anti-inflammatory Agents: Aminosaliclates, Azathioprine, Biologicals	2	4 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	TBD
Jan 25 (W)	2H	Video-Lecture: Medicinal Chemistry of Anti-inflammatory Agents: Aminosaliclates, Azathioprine, Biologicals	2	4 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Aldrich

Jan 25 (W)	21	Video-Lecture: Management of Inflammatory Bowel Disease	2	4 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	TBD
Jan 26 (Th)	Thru 21	Case Studies: Inflammatory Bowel Disease (includes individual and team quizzes)	2 (4 workup)	4 (Prep for quiz and case)	2 Quizzes at start of class assess knowledge from video-lectures from individual/online study. Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	Aldrich & TBD
		Module 3: Colorectal Cancer (Approximately 4.5 hours of direct instruction & 9 hours out of class; total = 13.5 hr) PTR: TBD				

Jan 26 (Th)	3A	Video-Lecture: Management of Colorectal Cancer	1.5	3 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	TBD
Jan 26 (Th)	3B	Video-Lecture: GI Health & Wellness (colorectal screening, obesity, etc.)	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	TBD
Jan 27 (F)	Thru 3B	Case Studies: Colorectal Cancer (includes individual and team quizzes)	2 (4 workup)	4 (Prep for quiz and case)	2 Quizzes at start of class assess knowledge from video-lectures from individual/online study. Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	TBD

	Module 4: Hepatic Disease (Approximately 7.5 hours of direct instruction & 15 hours out of class; total = 22.5 hr)					
	Pharmacology: Lindsey Childs-Kean Medicinal Chemistry: Margaret James PTR: Lindsey Childs-Kean					
Jan 30 (M)	4A	Video-Lecture: Pharmacology of Hepatitis Antivirals	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Childs-Kean
Jan 30 (M)	4A	Video-Lecture: Management of Hepatitis	2	4 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Childs-Kean
Jan 30 (M)	4B	Video-Lecture: Management of Portal Hypertension & Cirrhosis	1.5	3 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class)	Childs-Kean

					just prior to the case study.	
Jan 30 (M)	4C	Video-Lecture: Transcending Concept: Hepatitis C – Personalized Medicine	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Childs-Kean
Feb 1 (W)	Thru 4C	Case Studies: Cirrhosis and Hepatitis (includes individual and team quizzes)	2 (4 workup)	4 (Prep for quiz and case)	2 Quizzes at start of class assess knowledge from video-lectures from individual/online study. Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	Childs-Kean
Feb 2 (Th)	Exam #1 (Covers Modules 1-4)		2	8	Exam is 20% of grade; Administered in classroom via ExamSoft	

	Module 5: Nutrition & Weight Management (Approximately 8 hours of direct instruction & 16 hours out of class; total = 24 hr)					
	Pharmacology: Joanna Peris Medicinal Chemistry: Robert Huigens PTR: Carol Motycka					
Feb 3 (F)	5A	Video-Lecture: Pharmacology of Vitamins	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	TBD
Feb 3 (F)	5B	Video-Lecture: Pharmacology of Weight Loss Agents/Stimulants	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Peris
Feb 3 (F)	5C	Video-Lecture: Medicinal Chemistry of Vitamins, Weight Loss Agents/Stimulants	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class)	Huigens

					just prior to the case study.	
Feb 3 (F)	5D	Video-Lecture: Pharmacotherapy of Vitamins	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Weitzel
Feb 3 (F)	5E	Video-Lecture: Obesity and Bariatric Dosing	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Motycka
Feb 3 (F)	5F	Video-Lecture: Weight Loss— Including Self-care	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Motycka
Feb 6 (M)	Thru 5F	Case Studies: Weight Loss (includes individual and team quizzes)	2 (4 workup)	4 (Prep for quiz and case)	2 Quizzes at start of class assess knowledge from video-lectures from	Huigens, Motycka, Peris, Weitzel

					individual/online study.	
					Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	
		Module 6: Introduction to the Renal System (Approximately 7.75 hours of direct instruction & 15.5 hours out of class; total = 23.25 hr) Pharmacology: Eric Krause Medicinal Chemistry: Margaret James PTR: Stacy Voils				
Feb 6 (M)	6A	Video-Lecture: Pathophysiology of the Renal System	2	4 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Krause & Dupree
Feb 8 (W)	6B	Video-Lecture: Fluids and Electrolytes	1	2	Knowledge assessed by individual and team	Voils & Feild

				(Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	quizzes (in class) just prior to the case study.	
Feb 8 (W)	6C	Video-Lecture: Acid-Base Balance	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Voils & Feild
Feb 8 (W)	6D	Video-Lecture: Estimating Renal Function—Re-enforce Dosage Individualization Yr 1	0.75	1.5 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	TBD
Feb 8 (W)	6E	Video-Lecture: Transcending Concept: Pharmacokinetic-Dosing in Hepatic / Renal Dysfunction	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Bihorel
Feb 9 (Th)	Thru 6E	Case Studies: Renal Impairment (includes individual and team quizzes)	2 (4 workup)	4 (Prep for quiz and case)	2 Quizzes at start of class assess knowledge from video-lectures from	Bihorel, Dupree, Feild, Krause, Voils, TBD

					individual/online study. Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	
	Module 7: Renal Failure & Disease (Approximately 14.75 hours of direct instruction & 29.5 hours out of class; total = 44.25 hr) PTR: Lori Dupree					
Feb 10 (F)	7A	Video-Lecture: Drug-Induced Renal Disease	1.5	3 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Dupree
Feb 10 (F)	7B	Video-Lecture: Acute Renal Failure	1.5	3 (Allows for re-watch of video-lectures and textbook/journal	Knowledge assessed by individual and team quizzes (in class)	Dupree

				readings with the same content.)	just prior to the case study.	
Feb 13 (M)	Thru 7B	Case Studies: Acute Renal Failure (includes individual and team quizzes)	2 (4 workup)	4 (Prep for quiz and case)	2 Quizzes at start of class assess knowledge from video-lectures from individual/online study. Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	Dupree
Feb 13 (M)	7C	Video-Lecture: Chronic Kidney Disease (including common problems such as anemia of CKD)	2.5	5 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Dupree
Feb 13 (M)	7D	Video-Lecture: Transcending Concept: Health Information & Informatics—Foundation Informatics – Data Quality in CDSS	1	2 (Allows for re-watch of video-lectures and textbook/journal	Knowledge assessed by individual and team quizzes (in class)	Hatton

				readings with the same content.)	just prior to the case study.	
Feb 15 (W)	7E	Video-Lecture: Transcending Concept: Drug Individualization—Dialysis; Hemodialysis and Peritoneal Dialysis	2	4 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Childs-Kean, Dupree
Feb 15 (W)	7F	Video-Lecture: Transcending Concept: Population Care—Formulary Case (phosphate binders)	0.5	1 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Hatton
Feb 15 (W)	10C	Video-Lecture: Transcending Concept: Medication Safety (HIT – New Problems-New Solutions)	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Schentrup & Winterstein
Feb 22 (W)	8C	Video-Lecture: Transcending Concept: Health Disparities; Health Literacy—Renal Patients	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Dupree

Feb 22 (W)	10E	Video-Lecture: Transcending Concept: Professionalism / Ethics	0.75	1.5 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Allen
Feb 17 (F)	Thru 7F	Case Studies: Chronic Renal Failure (includes individual and team quizzes)	2 (4 workup)	4 (Prep for quiz and case)	2 Quizzes at start of class assess knowledge from video-lectures from individual/online study. Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	Allen, Childs-Kean, Schentrup, Winterstein, Dupree, Hatton
Feb 20 (M)	Exam #2 (Covers Modules 5-7)		2	8	Exam is 20% of grade; Administered in classroom via ExamSoft	
	Module 8: Infectious Diseases of the Kidney (Approximately 4 hours of direct instruction & 8 hours out of class; total = 12 hr)					

	PTR: Ken Klinker					
Feb 22 (W)	8A	Video-Lecture: Management of Complicated UTIs	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Jourjy
Feb 22 (W)	8B	Video-Lecture: Management of Pyelonephritis	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Klinker
Feb 23 (Th)	Thru 8C	Case Studies: Complicated UTIs (includes individual and team quizzes)	2 (4 workup)	4 (Prep for quiz and case)	2 Quizzes at start of class assess knowledge from video-lectures from individual/online study. Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to	Dupree, Jourjy, Klinker

					collaborate as a team member.)	
		Module 9: Gastrointestinal Infections (Approximately 6 hours of direct instruction & 12 hours out of class; total = 18 hr) PTR: Lindsey Childs-Kean				
Feb 24 (F)	9A	Video-Lecture: Management of Gastrointestinal Infections	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Childs-Kean
Feb 24 (F)	9B	Video-Lecture: Management of Intra-abdominal Infections	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Childs-Kean
Feb 24 (F)	9C	Video-Lecture: Management of <i>Clostridium difficile</i> Infections	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Klinker

Feb 24 (F)	10B	Video-Lecture: Transcending Concept: Interprofessional Communication—Present Oral/Written Plan Using Evidence	1	2 (Allows for re-watch of video-lectures and textbook/journal readings with the same content.)	Knowledge assessed by individual and team quizzes (in class) just prior to the case study.	Vogel-Anderson
Feb 27 (M)	Thru 9C	Case Studies: Intra-abdominal Infections (includes individual and team quizzes)	2 (4 workup)	4 (Prep for quiz and case)	2 Quizzes at start of class assess knowledge from video-lectures from individual/online study. Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	Klinker & Venugopalan
	Module 10: Capstone (Approximately 6 hours of direct instruction & 12 hours out of class; total = 18 hr) Pharmacology: Eric Krause					

	Medicinal Chemistry: Margaret James PTR: Lindsey Childs-Kean					
Feb 27 (M)	1A-10F	Case Studies: Capstone #1 (includes individual and team quizzes)	2 (4 workup)	4 (Prep for case)	2 Quizzes at start of class assess knowledge from video-lectures from individual/online study. Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)	All Faculty
Feb 29 (W)	1A-10F	Case Studies: Capstone #2	2 (4 workup)	4 (Prep for case)	2 Quizzes at start of class assess knowledge from video-lectures from individual/online study. Team Assessment (There is both a team assessment of knowledge and use of	

					CATME Rubric to assess ability of student to collaborate as a team member.)	
Mar 1 (Th)	1A-10F	Case Studies: Capstone #3	2 (4 workup)	4 (Prep for case)	<p>2 Quizzes at start of class assess knowledge from video-lectures from individual/online study.</p> <p>Team Assessment (There is both a team assessment of knowledge and use of CATME Rubric to assess ability of student to collaborate as a team member.)</p>	
Mar 2 (F)	All Modules	Comprehensive Final Exam (Items Cover All Modules and All Prior Coursework)	2.0	8	Exam is 20% of grade; Administered in classroom via ExamSoft	
		Total Contact Hours	92 (includes final exam)	202 hours		

^aThis column contains the direct contact hours [hr]. Double the number of hours is expected to be spent out of class (readings, studying, and preparation for class). Cases will be usually 4 hours, but will only count as 2 hours of time because time is devoted for students to discuss/learn in teams and learning involves recitation.

This course is estimated to require 270 hours over 7.5 weeks (i.e., 36 hours per week for a 6-credit-hour course) = 90 hours (i.e., 12 hours per week) of “direct faculty instruction” (videos and in-class time) and a minimum of 180 hours (i.e., 24 hours per week) of “out-of-class” (readings, studying, and preparation for cases) work. Note: As noted by UF policy, for each hour of “Instructor Contact,” students are expected to spend a minimum of 2 hours of additional time completing learning activities. Thus, if a week has 15 hours of Instructor Contact, the student should plan on a minimum of 30 additional hours of study. Therefore, they typical student will devote 45 hours of effort to the course that week. The course hours estimated in this syllabus are for a “typical” student – some students will find that they will devote less time, while others will need to devote more time.

Assessment Item	Grade Percentage
Individual Quizzes Each Case Studies Session includes an individual quiz (N = 13)	10
Team Assessment* Each Case Studies Session includes a team quiz (N = 13)	20*
Exam #1	20
Exam #2	20
Final Exam	30
Total	100%

*Please note that team quiz points earned in this course will be reduced with an up to a 5-point deduction should your contribution to your team's effectiveness, assessed using CATME (Appendix D [peer assessment]), finds that your performance requires improvement. For example, a student earning 13 of 15 possible points for a tRAT category could see earned points drop to 8 out of the 15 possible points.