

# The University Of Toledo

## New Graduate Course Proposal

\* denotes required fields

1. College\*:
- Department\*:
2. Contact Person\*:  Phone:  (xxx - xxxx) Email:
3. Alpha/Numeric Code (Subject area - number)\*:  -
4. Proposed title\*:
- Proposed effective term\*:  ( e.g. 201140 for 2011 Fall)
5. Is the course cross-listed with another academic unit?  Yes  No
- Approval of other academic unit (signature and title)
- Is the course offered at more than one level?  Yes  No
- If yes, an undergraduate course proposal form must also be submitted. If the undergraduate course is new, complete the [New Undergraduate Course Proposal](#); if the undergraduate course is existing, submit an [Undergraduate Course Modification Proposal](#).
6. Credit hours\*: Fixed:  or Variable:
- to
7. Delivery Mode:
- |                           | Primary*                             | Secondary                                   | Tertiary                                    |
|---------------------------|--------------------------------------|---|---|
| a. Activity Type *        | <input type="text" value="Lecture"/> | <input type="text" value="--SelectType--"/> | <input type="text" value="--SelectType--"/> |
| b. Minimum Credit Hours * | <input type="text" value="2"/>       | <input type="text"/>                        | <input type="text"/>                        |
| Maximum Credit Hours *    | <input type="text" value="2"/>       | <input type="text"/>                        | <input type="text"/>                        |
| c. Weekly Contact Hours * | <input type="text" value="2"/>       | <input type="text"/>                        | <input type="text"/>                        |
8. Terms offered:  Fall  Spring  Summer
- Years offered:  Every  Alternate

**Year                      Years**

9. Are students permitted to register for more than one section during a term?  No  Yes

May the courses be repeated for credit?

No  Yes

Maximum Hours

10. Grading System\*:
- Normal Grading (A-F, S/U, WP/WF, PR, I)
  - Satisfactory/Unsatisfactory (A-C, less than C)
  - Grade Only (A-F, WP/WF, PR, I)
  - Audit Only
  - No Grade

11. Prerequisites (must be taken **before**): i.e. C or higher in (BIOE 4500 or BIOE 5500) and C or higher in MATH 4200

None

PIN (Permission From Instructor)

PDP (Permission From Department)

Co-requisites (must be taken **together**):

PHPR 6450

12. Catalog Description\* (**75 words Maximum**)

An integrated course that includes Pharmacology, Medicinal and Physiological Chemistry, and Pharmacy Practice to study the etiology, pathophysiology, clinical presentation, diagnosis, and treatment of gastrointestinal disorders.

13. Attach a syllabus - a syllabus template is available from the University Teaching Center. Click [here](#) for the Center's template.

File Type	View File
Syllabus	<a href="#">View</a>

14. Comments/Notes:

New PharmD Curriculum

### 15. Rationale:

New PharmD Program was developed to meet new accreditation standards (Standards 2016) set out by the Accreditation Council for Pharmacy Education.

### Course Approval:

Department Curriculum Authority:	Mariann D Churchwell	Date	2017/02/15
Department Chairperson:	Diane Cappelletty	Date	2017/02/15
College Curriculum Authority or Chair:	Frederick E. Williams	Date	2017/02/17
College Dean:	Laurie S. Mauro	Date	2017/02/20
Graduate Council:	Constance schall, GC mtg 4/18/17	Date	2017/04/19
Dean of Graduate Studies:	Amanda C. Bryant-Friedrich	Date	2017/05/01
Office of the Provost :		Date	

print

### Administrative Use Only

**Effective Date:**   (YYYY/MM/DD)

**CIP Code:**

**Subsidy Taxonomy:**

**Program Code:**

**Instructional Level:**

### Registrar's Office Use Only

**Processed in Banner on:**  

**Processed in Banner by:**

**Banner Subject Code:**

**Banner Course Number:**

**Banner Term Code:**

**Banner Course Title:**



**Integrated Module – GI**  
**The University of Toledo**  
**College of Pharmacy & Pharmaceutical Sciences**  
**PHM 6030**

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<b>Coordinator:</b>	TBD	<b>Class Location:</b>	TBD
<b>Email:</b>	TBD	<b>Class Day/Time:</b>	XXX & XXX pm (tentative)
<b>Office Hours:</b>	by appointment	<b>Credit Hours:</b>	2 credit hours
<b>Office Location:</b>	TBD	<b>Term:</b>	Fall 2020
<b>Office Phone:</b>	TBD		

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**Additional Instructors:**

<b>Instructor:</b>	TBD
<b>Email:</b>	TBD
<b>Office Hours:</b>	TBD
<b>Office</b>	TBD
<b>Location:</b>	
<b>Office Phone:</b>	TBD

<b>Instructor:</b>	TBD
<b>Email:</b>	TBD
<b>Office Hours:</b>	TBD
<b>Office</b>	TBD
<b>Location:</b>	
<b>Office Phone:</b>	TBD

**COURSE/CATALOG DESCRIPTION**

An integrated course that includes Pharmacology, Medicinal and Physiological Chemistry, and Pharmacy Practice to study the etiology, pathophysiology, clinical presentation, diagnosis, and treatment of gastrointestinal disorders.

**COURSE OVERVIEW**

Students will be exposed to the integrated principles of medicinal chemistry, pharmacology and therapeutics as it relates to gastrointestinal disorders. After successfully completing this course the student learner should:

- Describe how chemical structure affects the action of a drug in the body (structure activity relationship (SAR))
- Discuss the absorption, distribution, metabolism, and excretion (ADME) of drugs and drug classes and how they affect the body
- Describe the common gastrointestinal disorders and the appropriate therapies to treat them

**UTCP DOCTOR OF PHARMACY ABILITY BASED OUTCOMES - achieved in this course**

**Domain 1 – Foundational Knowledge**

**1.1. Learner (Learner)** - Develop, integrate, and apply knowledge from foundational sciences (i.e. *pharmaceutical, social/behavioral/administrative, basic biomedical sciences and clinical sciences*) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and *patient centered care*.

**Domain 2 – Essentials for Practice and Care**

**2.1. Patient-centered care (Caregiver)** - Provide *patient-centered care* as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities).

### **Domain 3 - Approach to Practice and Care**

**3.1. Problem Solving (Problem Solver)** – Identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.

## **STUDENT LEARNING OUTCOMES (SLOs)**

After successful completion of this course the student learner should be able to:

1. Describe the mechanisms underlying the normal and abnormal functioning of the gastrointestinal system, and relate these to the potential goals of pharmacological interventions. [UT CPPS Ability Based Outcome (ABO) 1.1]
2. Explain the mechanisms mediating the actions of therapeutic drugs on normal and abnormal gastrointestinal system function. [ABOs 1.1, 3.1]
3. Identify key pharmacophores of commonly described therapeutics. [ABOs 1.1, 3.1]
4. Predict the effect of structural changes around pharmacophores on ADME and efficacy based on a general understanding of the SAR for each drug class. [ABOs 1.1, 3.1]
5. Explain the effect of chemical structural changes on drug ADME. [ABOs 1.1, 3.1]
6. Discuss the pathophysiology, clinical presentation and diagnosis of selected gastrointestinal disorders. [ABO 1.1]
7. Evaluate the appropriateness of gastrointestinal disorder treatment regimens while considering contraindications, adverse effects, drug-drug interactions, and evidence of efficacy. [ABOs 1.1, 2.1, 3.1]
8. Select the most appropriate treatment(s) (pharmacological and non-pharmacological) for selected gastrointestinal-related conditions, including corresponding monitoring plans. [ABOs 1.1, 2.1, 3.1]
9. Prepare patient specific education plans for patients with gastrointestinal disorders. [ABOs 2.1, 3.1]

## **PREREQUISITES AND COREQUISITES**

**Prerequisite:** none

**Corequisite:** PHPR 6450

## **REQUIRED TEXTS AND ANCILLARY MATERIALS**

- Goodman and Gilman's The Pharmacological Basis of Therapeutics, 12<sup>th</sup> ed. (2011), by Brunton, et al; published by McGraw-Hill; ISBN-13: 978-0071624428
- Foye's Principles of Medicinal Chemistry, 6<sup>th</sup> ed. (2007), by Lemke, et al; published by Lippincott/W&W; ISBN-13: 978-0781768795
- Pharmacotherapy Principles and Practice, 4<sup>th</sup> ed. (2016), by Chisholm-Burns, et al; published by McGraw-Hill; ISBN-13: 978-0071835022
- Pharmacotherapy: A Pathophysiologic Approach, 10<sup>th</sup> ed. (2017), by DiPiro, et al; published by McGraw-Hill; ISBN-13: 978-1259587481 (*Access Pharmacy*)

## **TECHNOLOGY REQUIREMENTS**

1. Laptop computer or tablet device that allows a student to take online exams that utilize ExamSoft
2. Students will need to have access to *Blackboard* "online" to obtain course notes, readings, and information relative to the course

3. A Turning Technologies ResponseCard (“clicker”) will be needed on certain days of the course

## UNIVERSITY POLICIES

### **Policy Statement on Non-Discrimination on the basis of Disability (ADA)**

The University is an equal opportunity educational institution. Please read “The University’s Policy Statement on Nondiscrimination on the Basis of Disability-Americans with Disability Act compliance (Policy Number: 3364-50-03)” available at:

[http://www.utoledo.edu/policies/administration/diversity/pdfs/3364\\_50\\_03\\_Nondiscrimination\\_o.pdf](http://www.utoledo.edu/policies/administration/diversity/pdfs/3364_50_03_Nondiscrimination_o.pdf) .

### **Academic Accommodations**

With respect to academic accommodations, The University of Toledo is committed to providing equal access to education for all students. If you have a documented disability or you believe you have a disability and would like information regarding academic accommodations/adjustments in this course, please contact the [Student Disability Services Office](#) located at Rocket Hall 1820 (phone: 419/530-4981; email: [uofficeofaccessibility@utoledo.edu](mailto:uofficeofaccessibility@utoledo.edu) ) as soon as possible for more information and/or to initiate the process for accessing academic accommodations. Students with disabilities receiving accommodations through the Student Disability Services Office are encouraged to discuss these with the faculty so that we may be better informed on how to assist you during the semester.

Students need to notify the course coordinator and pertinent course faculty that they would like to take an exam with accommodations due to a disability at least three full working/business days before the exam day to allow faculty time to make arrangements to meet the accommodation needs of students.

*Ex. #1:* If the exam is on a Wednesday, the faculty member needs to be notified by the end of the business day of the preceding Thursday (assuming none of the weekdays is a holiday) to allow him/her three full business days to meet accommodations.

*Ex. #2:* If the exam is on a Wednesday and the preceding Monday is a holiday, the faculty member needs to be notified by the end of the business day of the preceding Wednesday to allow him/her three full business days to meet accommodations.

## ACADEMIC POLICIES

### ***Missed Class Policy***

This course follows the University of Toledo Missed Class Policy. This policy provides for basic protections and reasonable accommodations for students who miss class with excused absences. Students are expected to attend every class meeting of courses in which they are registered. Only in specific, unavoidable situations does the University excuse absences from class: 1) personal emergencies, including, but not limited to, illness of the student or of a dependent of the student [as defined by the Board of Trustees’ Policy on Family and Medical Leave], or death in the family; 2) religious observances that prevent the student from attending class; 3) participation in University-sponsored activities, approved by the appropriate University authority, such as intercollegiate athletic competitions, activities approved by academic units, including artistic performances, R.O.T.C. functions, academic field trips, and special events connected with coursework; 4) government-required activities, such as military assignments, jury duty, or court appearances; and 5) any other absence that the professor approves.

Students are responsible for complying with the missed class policies of their instructors. Students bear the responsibility of notifying the instructor of a planned absence by one of the methods provided by the instructor.

In the event of an emergency or an unavoidably short notice of absence, the student must present the instructor with an approved written excuse upon the student's return to class. Approved written excuses will be at the instructor's discretion, including, but not limited to, doctor's notice, funeral programs, etc. It is **strongly recommended** that the student use two of the three aforementioned methods (email, writing, or voicemail) to insure that the instructor is properly notified of the planned absence.

Students are responsible for all material covered in classes they miss, even when their absences are excused as defined above. Students must make arrangements with instructors to complete missed assignments, labs, examinations or other course requirements. In turn, instructors are not to penalize students with excused absences.

**Drop/Withdrawal Information**

Students who decide not to attend or stop attending any or all classes for which they have registered must drop or withdrawal from the course(s). Drops and withdrawals can be processed online through the myUT portal (provided there are no holds), and can also be processed in the Office of the Registrar, Mulford Library 114 or at Rocket Solution Central (RSC) located in Rocket Hall, Room 1200. Failure to drop or withdrawal from a course for which a student has stopped attending may result in a grade of "F". Specific drop and withdrawal dates for a term are listed on the University's academic calendar available at: <http://www.utoledo.edu/offices/provost/calendar/index.html> .

**Warning:**

Withdrawing from a course(s) will result in a grade of "W", which will appear on your official transcripts. Once a withdrawal is processed, it cannot be rescinded. Based on the date of withdrawal, fees may or may not be adjusted. Since withdrawn courses reduce your enrolled hours, withdrawing from courses may have an adverse effect on financial aid benefits, scholarships, loan deferments, athletic eligibility, health insurance, veteran's benefits, degree requirements, or other areas. If you are uncertain what effect withdrawing from the course(s) would have, it is recommended that you contact the appropriate department for guidance.

**COURSE EXPECTATIONS**

*All assignments are expected to be completed by the deadline. Students are expected to complete the assigned readings and/or listen to the lecture captures prior to lecture.*

**GRADING**

**Examinations** (There are 2 scheduled exams, plus the final exam)

		<b>SLO Assignments</b>
<b>Examination 1 (Date TBD)</b>	<b>30%</b>	<b>All</b>
<b>Examination 2 (Date TBD)</b>	<b>30%</b>	<b>All</b>
<b>Final Examination (Date TBD) <i>Comprehensive</i></b>	<b>40%</b>	<b>All</b>

**Please note:** Students earning less than a C on exams 1 or 2 **must** go to the Academic Enrichment Center located in Mulford Library (room 506/507) for additional support and academic coaching.



## **Midterm Grade**

Your midterm grading status can be determined by averaging the numeric score of your first two exams and viewing what grade corresponds to this average score using the “Grading Scale Used to Determine Your Final Grade” chart below. Those scoring less than a 70% after two exams will be referred to the Academic Enrichment Center located in Mulford Library (room 506/507) for additional support and academic coaching.

Students missing a grade in one of the first two exams without an excuse will be considered “not attending class.” Please note that if you are considered “not attending class,” it could impact your financial aid (scholarships, grants, loans, or Federal Work Study). If you decide you are not going to attend this class (or any other class you have registered for), you must formally withdraw (drop) from the course. You can do this by logging onto the [myUT](#) portal, clicking on the “Student” tab, and then under My Toolkit clicking on Register/Drop/Withdraw. For more information about add/drop dates please visit the Registrar's Office online at: [http://www.utoledo.edu/offices/registrar/registration\\_dates.html](http://www.utoledo.edu/offices/registrar/registration_dates.html).

## **GRADING SCALE USED TO DETERMINE YOUR FINAL GRADE**

A course average of 90% assures an A

A course average of 80% assures a B

A course average of 70% assures a C

A course average of 60% assures a D

## **COMMUNICATION GUIDELINES**

Students should use the email address listed at the top of this syllabus to contact course instructors. Instructors typically return emails within 1-2 business days and should not be expected to respond on weekends. University email (“rockets.utoledo.edu”) will be the only email used for communication to students in the course. Announcements are also regularly posted to the Blackboard course website. Students are expected to check their university email and course Blackboard site regularly throughout the semester.

## **ACADEMIC SUPPORT SERVICES AND ACADEMIC HELPFUL HINTS**

The University of Toledo is committed to your academic success and offers a wide array of programs and services to ensure success, a few examples of resources available to you are:

### **Tutoring Services**

Tutoring support for all UT students is available through the [Learning Enhancement Center](#) located in the Carlson Library. Tutoring Services are offered in an array of subjects, including Writing, Math (Calculus, Statistics, and Accounting) Biology, Chemistry, and Anatomy and Physiology.

### **The Counseling Center**

Transitioning to college and/or maintaining a healthy well-being while attending college can be difficult, if you or a friend ever feel overwhelmed adjusting to college or in need of crisis intervention or mental health services please contact the [Counseling Center](#).

### **Success Coach**

As of Fall 2013, all new students were assigned a Success Coach to help students navigate their college experience by serving as a single point of contact. Your Success Coach can help you build and develop skills, refer you to support services, and aid in your overall success at The University so be sure to stay connected to him/her throughout your academic journey! If you need assistance connecting with your Success Coach send an email to [successcoach@utoledo.edu](mailto:successcoach@utoledo.edu).

## CLASS POLICIES

1. Classes are scheduled to start promptly.
2. All required readings are either out of *required* textbooks or from articles or textbooks that will be made available at University libraries, student resource room files, or on-line. If a student chooses the "photocopying route" of acquiring required readings, the photocopying will be the responsibility of the student.
3. Telephones, pagers, or any other device that makes sound are to be turned off during lecture (or at least be programmed into the "vibrating" mode) AND are NOT to be on or be set to a "vibrating" mode or be used in any capacity during an examination.
4. No pets or children are to be brought to the classroom.
5. Playing of musical instruments is not permitted in the classroom.
6. Students may audiotape lectures; otherwise, no A/V equipment, "smart" phones, "smart" watches, or use of other telephotoing or televideoing devices are to be used during class.
7. For issues pertaining to lecture content, contact the lecturer of the topic. For issues pertaining to grades, tests, lecture schedule, reading assignments, missing a class or test, etc., contact the course coordinator. Issues pertaining to grading should be brought to the instructor's attention by the end of the second "workday" following the day exam grades are released.
8. Other than the *Examination* dates provided, class attendance on lecture days, although expected, is not a requirement for the course. If a student is absent from a lecture day, it is his/her responsibility to obtain the material discussed in class on that day as well as obtaining any handouts, information, or announcements presented to the class that day. On examination days, the course abides by The University of Toledo Missed Class Policy.
9. When arriving tardy or leaving early from class, the student should do so in a manner that is not disruptive to the class. If disruptive, the student is placing him/herself at risk of being removed from class on that day and/or barred from class for one or more days in the future.
10. Students are to conduct themselves in a mature, professional manner and obey the principles of the Professional Pledge between students and faculty.
11. During class, only **one** individual is to be talking at any given time.
12. During class, students are to behave in a manner that will not distract others.
13. During class, students are not to be smoking (including using E-cigarettes) or using or expectorating chewing tobacco.
14. Students should refrain from "surfing" the internet because studies have proven that a "surfing" student not only distracts from his/her own learning but that of innocently distracted classmates.

## EXAMINATION REGULATIONS

- A. Promptness - Students are to be in the assigned **examination room and their seat** at the start of the class period. **No extra time** will be permitted for students who arrive late for an examination. Students who do arrive late, provided no previously arriving student has finished his/her examination and left the room, will be subject to **losing 1 point for each minute he/she is late**. However, **if a student arrives late, but after a previously arriving student has finished his/her examination and left the room**, the tardy student will be considered to have been absent from taking the examination and will be treated as described below in MAKEUP EXAMINATIONS.
- B. Articles in Examination Room - Generally, unless otherwise **noted**, only a few #2 pencils will be permitted at your desk. Purses, backpacks, book bags, pencil pouches, notebooks, papers, books, telephones, electronic devices, erasers (other than the end of a pencil), or anything *not needed* for you to take a test **should not be brought to the classroom due to limited space in the classroom and definitely are to be away from your desk while taking the examination**. Additionally, coats, hats, or any other clothing should be placed **away from your examination desk**. Faculty for this course will provide tissues for those with “sniffles.” The use of pagers, telephones, PDAs, “smart” watches, or other electronic equipment is not permitted to be used in any capacity during an examination and **are not to be used in the classroom and should be turned off**. No “bands” or watches are to be worn. Students should bring a few #2 pencils since portions of exams may be computer graded.
- C. Calculators can be used on examinations **only when permitted**. When permitted, the only calculator permitted is the **TI-30X IIS (without its cover)**. No other calculator will be permitted even if you were allowed to use the calculator in a different course. Each student is to have his/her own calculator. Students are NOT to use “smart” eyeglasses, watches, or any other such device during examinations.
- D. Violation of the Student Academic Code, Course testing policies, & Academic Testing Center Policies - Violation of the student academic code, course testing policies, or academic testing center policies WILL NOT BE TOLERATED on any examination. Individuals accused of a violation will be prosecuted according to the policies and procedures of the College and University and subject themselves to receiving a grade of “0” on the examination or a grade of “F” for the course.
- E. Seating - Instructors reserve the right to seat students during examinations as they see necessary.
- F. Format of Examinations - The final format of each examination is determined by the instructor(s) responsible for that section of lecture material. Multiple choice, true/false, and mark all that apply will be utilized most often; however, essay, short answer, fill-in, matching, and place in order questions may also be used. Make up exams can a greater portion of essay and short answer questions.
- G. Asking Questions - Technical questions (misspellings, missing a page, wrong numbering or lettering, etc.) will happily be answered during examinations. Any questions arising regarding interpretation of an exam question are encouraged to be written out on the back of the front page of the test and be brought to the attention of the instructor when handing in the test. When doing so, “check” the box on the front page of the exam and indicate the question you have an inquiry on.
- H. The use of dictionaries of any sort during examinations is prohibited.
- I. Consumption of food or beverages, the use or expectoration of chewing tobacco, smoking (including the use of E-cigarettes), or listening/viewing to audio/video equipment, is not permitted during examinations. No drinking or items to be ingested, chewed, or snorted are to be at your seat.
- J. Conversing with anyone other than instructors is not permitted once answer sheets and/or tests are being passed out. One may resume conversation once they have left the testing room. When speaking outside the classroom following an exam, voices should be at a level that will not disrupt those still in the classroom taking the exam.

## EXAMINATION REGULATIONS (continued)

- K. Items in one's possession during an examination (such as watches, pencils, etc.) are subject to inspection.
- L. Students are responsible for assuring answer sheets to examinations are marked properly and that they have not overlooked answering any questions on the test before handing in the examination.
- M. Students shall treat their answer sheets and test booklets in a manner that does not allow or tempt other students to look at them.
- N. Students who request the use of the lavatory during an exam are subject to a 5-point deduction of their examination score.
- O. If a class period, during which an exam quiz was to be given, is canceled or interrupted, assume the exam or quiz will be given during the next scheduled class period if it is not completed on the assigned day.
- P. Grades will only be passed out directly to the student or mailed (via U.S. mail) directly to the student. Grades will not be given over the phone, to a friend, or through email.
- Q. ExamSoft may be used to for exams on select occasions. Read the "ExamSoft Procedures and Information" pages posted on Blackboard.

## MAKEUP EXAMINATIONS

- A. An unexcused absence resulting in a student absent from taking a particular exam will result the student receiving a grade of **zero** for that particular exam.
- B. Makeup exams will only be administered for *excused* absences from an exam. The course will follow The University of Toledo Missed Class Policy to determine if an absence is excused. *Prior approval* for an absence from an examination can only be obtained from acknowledged **direct person-to-person contact** with the course coordinator. Post-exam approval for an excused absence from an examination must be sought out *immediately* once the student is capable via email using the University email system followed by acknowledged **direct person-to-person contact** with **the course coordinator** *immediately* upon the student's arrival back to school. Detailed, well-documented proof explaining the reason for the absence will be required for an absence to become excused.
- C. Makeup examinations (the format of which may be multiple choice, essay, short answer, true/false, fill-in, matching, or any combination of these) will be given during Finals Week.
- D. Exceptions may be rarely possible with emergencies upon the discretion of the Course Coordinator.

**COURSE SCHEDULE: Integrated Module—Gastrointestinal**

Day	Topic (+ ALS)	Assignments	Department
Day 1	Course Introduction		M/P/PP
	<b>Cirrhosis</b>		
	Pathophysiology, epidemiology, risk factors, and diagnosis of cirrhosis		PP
	Drug classification, nomenclature, and properties (reinforcing concepts from ID and cardiology)		M/P
	Drug Mechanism of Action (MOA) and Pharmacokinetics (PK) (Absorption, Distribution, Metabolism, Excretion (ADME)) (reinforcing concepts from Infectious Diseases (ID) and cardiology)		M/P
	DDI, ADRs, Toxicity (reinforcing concepts from ID and cardiology)		M/P
	Therapeutics (with brief reminder of pathophysiology) of complications of cirrhosis	Complete activity in the simulation center (drug/toxin traveling through healthy liver, then a cirrhotic liver)	
Day 2	<b>Drug-Induced Liver Injury</b>		
	Pathophysiology, risk factors, diagnosis		PP
	<b>Inflammatory Bowel Disease (IBD)</b>		
	Pathophysiology, epidemiology, risk factors, and diagnosis of IBD		P/PP
	Drug classification, nomenclature, and properties		M
	Drug MOA and PK (ADME)		M/P
Day 3	DDI, ADRs, Toxicity		M/P
	Therapeutics of IBD		PP
	<b>Nausea / Vomiting (N/V)</b>		
	Pathophysiology, epidemiology, risk factors, and diagnosis of N/V		P/PP
Day 4	Drug classification, nomenclature, and properties		M/P
	<b>Exam 1 (Cirrhosis through Inflammatory Bowel Disease (9 lecture hrs))</b>		
	Drug MOA and PK (ADME)		M/P
	DDI, ADRs, Toxicity		M/P
Day 5	Therapeutics of NV		PP
	<b>Constipation / Diarrhea / Irritable Bowel Syndrome</b>		
	Epidemiology, pathophysiology, risk factors, and diagnosis of constipation, diarrhea, and		PP

	irritable bowel syndrome (C/D/IBS)			
	Drug classification, nomenclature, and properties			M
	Drug MOA and PK (ADME)			M/P
	DDI, ADRs, Toxicity			
	General Therapeutics of C/D/IBS (+/- referral of prior content)			PP
	<b>GERD / Peptic Ulcer Disease</b>			
Day 6	Pathophysiology, epidemiology, risk factors, and diagnosis of GERD / PUD			P/PP
	Drug classification, nomenclature, and properties GERD / PUD			M
Day 7	<b>Exam 2 (Nausea/Vomiting through Constipation / Diarrhea / Irritable Bowel Syndrome)</b>			
	Drug MOA and PK (ADME) GERD / PUD			M/P
	DDI, ADRs, Toxicity GERD / PUD			M/P
Day 8	Therapeutics of GERD / PUD			PP
Final exam				

M= Med Chem  
P= Pharmacology  
PP= Pharmacy Practice