School of Pharmacy Required Course Syllabus
Fall – P3
PHAR 6475 Integrated Systems-Based Pharmacotherapy IIIA2
October 12th – December 1st 2022
MTWR 1:00-2:50pm | Campbell Building Room 214

Course Coordinator

Christopher G. Medlin, PharmD, BCPS	
Clinical Assistant Professor Office Phone: (915) 747-8551 Office Room Number: 704 Email: cgmedlin@utep.edu	**OFFICE HOURS:** Office hours will be offered either virtually or live by appointment only.

Course Faculty

Ian Mendez, PhD Office Room 715 iamendez2@utep.edu Phone: (915) 747-8216 Office hours: *Provided in Blackboard®*	Alaa Abdelhakiem, PharmD Office Room 717 akabdelhakie@utep.edu Office hours: *Provided in Blackboard®*
Denise I. Pinal, PharmD, BCPPS Office Room 718 denisepi@utep.edu Phone: (915) 747-5884 Office hours: *Provided in Blackboard®*	Rafael Sanchez, PharmD Office Room 501 Phone: (915) 747- Office hours: *Provided in Blackboard®*
Scott Weston, RPh, MBA, PhD Office Room 110k gsweston@utep.edu Phone: (915) 747-8242 Office hours: *Provided in Blackboard®*	

Office Hours

Students may request an appointment with the coordinator or individual faculty via e-mail. Individual guest faculty should provide office hours during lecture days. All appointments should be made at least 2 business days in advance. Virtual Office Hours will be synchronous through a UTEP-approved platform (e.g., Microsoft Teams, Blackboard, or Zoom) and will be used to discuss problematic exam questions and any course logistic problems. The course coordinator will try to respond as soon as possible (generally within 24-48 hours).

Course Description

The Integrated Systems-Based Pharmacotherapy (ISBP) course series begins in the P2 year (primary care focus) and continues through the P3 year (advanced pharmacotherapy/acute care/specialty focus), providing the essentials for integrating foundational knowledge with practice and care. Faculty from Pharmaceutical Sciences and Clinical Sciences will work together to design a comprehensive, integrated approach to pharmacotherapy, which includes a practical application lab and an integrated lab.

Source: https://doi.org/10.

Course Objectives (mapped to national outcomes):

At the conclusion of this course, students shall be expected to:

Course Objectives	CAPE Outcomes	PCOA	NAPLEX 2021	Types of Activities to Meet Learning Objectives	Assessment Measures	Level of Assessment (I) Introduce (R) Reinforce (A) Apply
Objective 1: Apply the basic anatomy and physiology concepts to understand the cellular and molecular organization of the system.	1.1	1.1.1		Readings, lectures, discussions, and class activities	Quizzes, Assignments, Mid-term, Final	**R**
Objective 2: Describe the pathophysiology responsible for all disease states covered.	1.1	4.2.1		Readings, lectures, discussions, and class activities	Quizzes, Assignments, Mid-term, Final	**R, A**
Objective 3: Classify the structure-activity relationships (SARs) to drug receptor/target interactions	1.1	2.1.1, 2.1.2, 2.1.4, 2.1.5	2.2.3, 2.2.5	Readings, lectures, discussions, and class activities	Quizzes, Assignments, Mid-term, Final	**R**
Objective 4: Identify SARs with regard to characteristic pharmacophores and drug-receptor interactions for specific drugs and drug classes.	1.1	2.1.3, 2.1.4	2.2.3, 2.2.5	Readings, lectures, discussions, and class activities	Quizzes, Assignments, Mid-term, Final	**R**
Objective 5: Illustrate the mechanism of pharmacological action (including toxicology, adverse effects, and drug-drug interactions) of specific drugs and drug classes in affecting/treating a targeted disease state.	1.1	2.2.1, 2.2.2, 2.2.3, 2.2.4	1.2.4, 1.2.5, 1.2.7, 1.2.10	Readings, lectures, discussions, and class activities	Quizzes, Assignments, Mid-term, Final	**R**
Objective 6: Apply the general principles of drug pharmacokinetics/pharmacodynamics and pharmacogenomics into the drug therapy plan.	1.1	2.5.3, 2.6.2 4.3.1, 4.3.2 4.4.1	1.2.11, 1.2.12	Readings, lectures, discussions, and class activities	Quizzes, Assignments, Mid-term, Final	**R, A**
Objective 7: Integrate pathophysiology concepts and basic principles of pharmaceutical sciences into the therapeutic decision-making process	1.1	4.1.5, 4.1.6 4.6.4		Readings, lectures, discussions, and class activities	Quizzes, Assignments, Mid-term, Final	**R, A**
Objective 8: Describe the etiology, incidence, and prognosis associated with disease states covered, including toxicological conditions.	1.1	3.1.4		Readings, lectures, discussions, and class activities	Quizzes, Assignments, Mid-term, Final	**R**
Objective 9: Recognize the major signs, symptoms, and clinical findings associated with each disease state, including toxicological conditions	1.1	4.6.3	1.1.4, 1.1.5	Readings, lectures, discussions, and class activities	Quizzes, Assignments, Mid-term, Final	**R**
Objective 10: Identify usual medication doses, dosage forms, adverse drug reactions, and monitoring parameters of drug classes	1.1	2.2.3, 4.7.1, 4.7.2, 4.7.8, 4.7.9	1.2.1, 1.2.8, 1.2.10, 1.2.14	Readings, lectures, discussions, and class activities	Quizzes, Assignments, Mid-term, Final	**R, A**
Objective 11: Formulate a comprehensive drug therapy plan that incorporates non-pharmacologic and pharmacologic approaches including first-line therapy, alternative therapies, monitoring parameters and diagnostic interpretations, desired therapeutic goals/outcomes, and considerations for special populations (e.g. pediatrics, geriatrics, multiple disease states).	2.1 3.1	4.1.4 4.5.1, 4.5.2 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.7.6, 4.7.7, 4.7.8	1.2.2, 1.2.3, 1.2.6, 1.2.9, 1.2.13	Readings, lectures, discussions, and class activities	Quizzes, Assignments, Mid-term, Final	**R, A**

Additional / Detailed Course Meetings & Location

ISBP IIIA2 will be taught live in Campbell Building Room 214 on MTWR from 1-2:50pm. In a major disruption (e.g., H1N1 epidemic, subzero weather), be prepared to maintain course progress via other means (e.g., Internet, our Blackboard course shell, etc.) and check your email (especially your UTEP miners account) regularly.

Methods of Instruction/Learning

UTEP or the SoP may change to primarily online course if major disruption (e.g., pandemic, weather) occurs. For tips on succeeding in an online environment, see: https://www.utep.edu/extendeduniversity/utepconnect/blog/february-2017/tips-for-online-learning-success.html.

The learning outcomes and assessment processes for this course will be achieved via:

1. Lecture Materials (e.g. pre-recorded videos, readings, in class lectures)
   - *The availability of lecture recordings after class will not be guaranteed and is up to instructor preference.*
2. Quizzes
3. Case Applications (e.g. EHR Go, data collection sheet, consult notes, discussion boards, SOAP notes)
4. Exams

Required Course Technology/Tools/Needs

Required Textbooks:

- Bauer LA. *Applied Clinical Pharmacokinetics.* 3rd ed. ISBN 978-0071794589. Available in AccessPharmacy.
- Brunton LL. *Goodman & Gilman's The Pharmacologic Basis of Therapeutics.* 13th ed. ISBN 978-0071624428. Available in AccessPharmacy.
- DiPiro JT. *Pharmacotherapy: A Pathophysiologic Approach*. 11th ed. ISBN 978-125958741. Available in AccessPharmacy.
- Hammer GD. *Pathophysiology of Disease: An Introduction to Clinical Medicine*. 7th ed. ISBN 978-0071806008. Available in AccessPharmacy.
- Hoffman RS. *Goldfrank's Toxicologic Emergencies*. 10th ed. ISBN 978-0071801843. Available in AccessPharmacy.
- Johnson JA. *Pharmacogenomics: Applications to Patient Care.* 3rd ed. ISBN 978-1939862099.
- Lemke TL. *Foye's Principles of Medicinal Chemistry*. 7th ed. ISBN 9781609133450.

Recommended Textbooks:

- Beale JM. *Wilson and Gisvold's Textbook of Organic Medicinal and Pharmaceutical Chemistry*. 12th ed. ISBN 978-0781779296.
- Bertino JS. *Pharmacogenomics: An Introduction and Clinical Perspective*. 1st ed. 978-0071741699. Available in AccessPharmacy.
- Golan DE. *Principles of Pharmacology: The Pathophysiologic Basis of Therapeutics.* 4th ed. ISBN 978-1451191004.
- Jameson JL. *Harrison's Principles of Internal Medicine*. 20th ed. ISBN 978-1-259-64403-0. Available in AccessPharmacy.
- Katzung BG. *Basic and Clinical Pharmacology*. 14th ed. ISBN 978-1259641152. Available in AccessPharmacy.
- LeFever Kee J. *Handbook of Fluids, Electrolytes, and Acid-Base Imbalances*. 3rd ed. ISBN 14353689. Available in Pharmacy E-Books.
- Morton DA. *The Big Picture: Gross Anatomy*. 1st ed. ISBN 978-0071476720. Available in AccessPharmacy.
- Murphy JE. *Clinical Pharmacokinetics*. 6th ed. ISBN 978-1585285365.
- Zdanowicz M. *Concepts in Pharmacogenomics*. 2nd ed. ISBN 978-1585285167.

Laptop Computer

Students are expected to bring laptop computers to the class each day for participation in on-line exercises or assessments. It is the responsibility of the students to make sure that laptops are in working condition and meet the University and School of Pharmacy IT requirements (See SOP Student Handbook). Students should be ready at any time to share their screen, camera, audio with classmates/faculty for online course learning situations

Calculator

- Students should have non-graphing, non-programmable calculator readily available for lecture and assessment activities.
- Some exams (e.g., ExamSoft®) may use the software calculator.

Software/Technology Testing

- Technology must be tested in during first week of courses to ensure functionality.
    - ExamSoft® Exam Monitor
    - Blackboard® Collaborate: Chrome Browser
    - Microsoft® Teams or UTEP Zoom®
    - EHR Go®

Attendance

The attendance policy for the School of Pharmacy is outlined in the Student Handbook. It is expected that students should demonstrate their commitment to the profession and respect for faculty, guest speakers, and colleagues by attending all classes and arriving to class on time prepared for the day's lesson(s).

Attendance at lectures is not mandatory in that attendance will not be taken at each lecture. However, attendance and punctuality at lectures are strongly recommended and expected as a sign of professional behavior. If large numbers of students are absent, the course coordinator reserves the right to give unannounced quizzes. Missing class for work is NOT a valid reason for your absence.

If a student has an excused absence (e.g. personal illness, family emergency, professional travel), they must notify the course coordinator(s) and instructor(s) teaching that day **at least 2 hours** prior to the start of class. Please refer to the Student Handbook for more information regarding required documentation for submission to the Office of Student Affairs.

If a student has an excused absence, they should immediately:

1) notify the course coordinator(s) and instructor(s)
2) Contact Director of Student Affairs (Mrs. Carmen Ramos: crtorres2@utep.edu) via online form - https://www.utep.edu/pharmacy/current-students/student-absence-form.html

To secure approval for an absence related to travel for professional meetings or for events that fall outside of the criteria outlined in the Student Handbook, please refer to the Handbook for more information regarding required documentation for submission to the Office of Student Affairs.

Classroom/Online Etiquette

Students are expected to be professionals and will be treated as such unless circumstances deem otherwise. Any behavior that impairs student ability to learn will not be tolerated (e.g., side conversation, cell phone use, electronic device use for activities not related to coursework). Laptops may be used during class for taking notes. Using laptops for other activities than taking notes causes a disruption to the class around you.

Questions Related to the Course and Grading/Exams

In general, questions related to the overall course should be directed to the coordinator. **Content/topic-specific questions** should be directed to the content instructor within **five (5) business days** of the material being presented.

Any questions concerning **assignments/exam grades** should be discussed with the **course coordinator within five (5) business** days after the grades have been posted.

Evaluation and Grading Policy

Course point distribution will be as follows:

Assessment	Lecture Hours	Total Points	Percent Course Grade
Module Assignments	-	20	7%
Module 1 Exam Pulmonology	8	32	12%
Module 2 Exam Advanced ID 1	8	32	12%
Module 3 Exam Advanced ID 2	13	52	18%
Module 4 Exam Advanced ID 3	11	44	16%
Module 5 Exam HIV 1	8	32	12%
Final Exam (Module 6 + Comprehensive)	5 (Module 6)	63 (15 Module 6 + 48 Comprehensive)	23%
Total		**275**	**100%**

Assignment of grades:

A = 90 – 100%
B = 80 – 89%
C = 70 – 79%
D = 60-69%
F = < 60%

Module Assignments: Faculty may assign pre-class assignments such as reading or watching "micro-lecture" videos to assist with outside class preparation. Pre-class quizzes may also be incorporated. Additional assignments/activities may include, but are not limited to, in-class or post-class quizzes, case application activities, SOAP notes, and team-based learning exercises (iRAT, tRAT). There will be four points allocated for Modules 1, 2, 3, 4, and 5. The distribution of points is subject to change depending on instructor availability and discretion. Students must be in-person in order to receive iClicker and/or in-person quiz credit. Completing iClicker and/or quiz questions while not being present will be viewed as academic dishonesty and reported to the Office of Student Conduct and Conflict Resolution (OSCCR).

Exams:
There will be a total of six exams including the final exam. The exams will consist of true/false, matching, multiple choice, multiple answer (e.g. select all that apply), fill-in-the-blank, and free response/short essay questions. All exams will be administered via ExamSoft®.

Exam-Related Technology and Guidance

Please refer to the UTEP School of Pharmacy Student Handbook for guidance for exams online/remote as well as on campus.

Online Assessment Requirements:
This course requires the use of ExamSoft®. Students are responsible for ensuring they have access to the online assessment system. Assessments will be disseminated before the due date. This requires students to download the assessment using an internet connection. It is the student's responsibility to maintain access to a reliable internet connection (with the rare exception of when UTEP's systems are down.

If students cannot access your online account, please contact **Adrian Enriquez (aealonso@utep.edu)**to resolve this issue **within five (5) business days of the first day of class**. Students are responsible for ensuring they have access to the online assessment system. Mr. Enriquez is **NOT available** for questions or laptop failures/requests **after business hours or on weekends.**

Exam Day Policy

Students must arrive on time for examinations. Students arriving after any student(s) has/have completed the exam and have left the room may not be allowed to sit for the exam, and may receive a score of zero. No allowances will be made for an exam being missed, other than documented illness or emergency. The student must contact the course coordinator for confirmation prior to the exam. If permission is granted to delay the exam; it is the student's responsibility to contact the course coordinator to arrange for an alternative exam time. In this event, the nature of the make-up will be at the discretion of the course coordinator (oral, written, increased weighting on the final, etc.). An unexcused absence from an exam may result in a grade of "zero" for that exam.

Student Expectations Prior and During Examination

Seating: Randomized assigned seating will be utilized for each examination.

Room: Students must arrive to room area 15 minutes ahead of examination. Students are not permitted to be in the examination room prior to assigned seating. If the student arrives after the examination has started, no additional time will be provided for the examination. If another student has already completed his/her exam and left the exam room when an unexcused late student arrival occurs, the late arrival will not be permitted to sit for the exam and will receive a grade of zero.

Exams: Electronic exams need to be **downloaded at a minimum 2 hours prior to the examination**.

Students are responsible for having a computer for electronic exams. Computers are available to check-out as a loan for exams from the ILC, and students should make early arrangements for securing computers. Students who show up without a computer to take an electronic exam will (1) be provided a paper exam, (2) may receive a grade deduction as stipulated in the course syllabus, and (3) will receive a professionalism referral to the SOP Progression Committee.

Availability of items during exam

By default, faculty will provide scratch paper for examinations, unless faculty determines scratch paper is not necessary in which case students will receive advance notice that scratch paper will not be provided. Only faculty will provide scratch paper, and only scratch paper provided by the School of Pharmacy can be used during the examination. Any scratch paper utilized during an examination must have the student's name and date on every page and all pages must be turned in at the completion of the examination. Any exemption will be noted accordingly in the syllabus.

- No backpacks, purses, hats, large coats, and/or other bulky clothing permitted; these items need to be left outside the examination room or in an area in the exam room designated by the faculty/proctor.
- No food or drink allowed during an exam.
- No electronic devices (for example: watches, phones, calculators, etc.) are permitted on the student during an examination unless approved by the instructor prior to the examination or inspected upon entry into the exam room for approval. A specific model for calculators may be specified in the course syllabus or provided in advance of the examination to students.
- Disruption of examination time due to an electronic device can result in a grade penalty as stipulated in the syllabus.
- Bathroom break: **No** bathroom breaks permitted during examinations unless a prior accommodation is made. Faculty maintain discretion over the permissibility of bathrooms breaks; students should expect that a proctor will accompany them to the restroom and will wait outside the restroom if permission for restroom use is granted. No additional time will be provided for examinations when restroom breaks occur.

Missed Quizzes/Exams/Assignments – Excused/Unexcused Absences

Only students who miss an exam as a result of an ***excused absence*** will be allowed to make-up the assessment. **Late submissions will not be accepted.** Students should consult the UTEP School of Pharmacy **Student Handbook** for definitions and examples of excused absences.

- The course coordinator MUST be notified **at least two hours prior to the start of class or the exam** for the student to be excused.
- In the case of **religious holidays or professional conference attendance**, the student MUST notify the course coordinator **ten (10) business days** prior to the exam. Students should not assume that they can miss an exam for vacation or other personal conflicts.
- Any unexcused absence from an assignment, quiz, and/or exam will result in a grade of **ZERO.**

The course coordinator will determine the time and date for a make-up exam, which will occur before the final exam period. If the student is unable to attend either the original exam or the make-up exam, the course coordinator is not required to provide additional opportunities for the student make-up exam. The format of the make-up examination is at the discretion of the course coordinator, and may include any question type including, but not limited to, open-ended questions, an essay examination, or oral examinations.

Remediation Policy

Students must participate fully in the course to be eligible for remediation. Please refer to the Student Handbook for end-of-course remediation policies and timelines (***see Table of Contents for End of Course Remediation***).

Course Evaluation

During this course, you will be provided with an opportunity to evaluate this course and your instructors. The Associate Dean for Assessment, Accreditation, and Strategic Planning will send an email reminder toward the end of this course for you to complete the course evaluation. UTEP uses an online course evaluation system. Course Evaluations can be taken at my.utep.edu by clicking on the CLASSES TAB on the left. The Course Evaluation module will appear and your classes will be listed. Click on the Course Name, or CRN, to complete the evaluation for the course. Your participation is an integral part of this course and the accreditation process, and your feedback is vital to improving education at the School of Pharmacy.

School of Pharmacy
Fall – P3
Course # PHAR 6475 (4 Credit Hours) / Track Integrated Systems Based Pharmacotherapy (ISBP)
Integrated Systems Based Pharmacotherapy
Course Dates (10/12/2022 – 12/01/2022)
Campbell Building Room 214
MTWTh: 1-2:50 pm

PHAR6475: Course Calendar and Topic Outline

Date	Time	Lecture Number	Topics	Instructor
Week 1				
Module 1: Pulmonology				
Wed 10/12	1-1:50	Lecture 1	***Course Overview/Syllabus Review*** Cystic Fibrosis Pharmacology	Medlin Mendez
	2-2:50	Lecture 2	Cystic Fibrosis Pharmacology	Mendez
Thu 10/13	1-1:50	Lecture 3	Cystic Fibrosis (including Special Populations) Pharmacotherapy & Pharmacogenomics	Pinal
	2-2:50	Lecture 4	Cystic Fibrosis (including Special Populations) Pharmacotherapy & Pharmacogenomics	Pinal
Week 2				
Mon 10/17	1-1:50	Lecture 5	Status asthmaticus (including Special Populations) Pharmacotherapy	Pinal
	2-2:50	Lecture 6	COPD Exacerbations Pharmacotherapy	Sanchez
Tue 10/18	1-1:50	Lecture 7	Bugs & Drugs Review Pharmacology	Abdelhakiem
	2-2:50	Lecture 8	Antimicrobial Resistance Pharmacotherapy	Abdelhakiem
Module 2: Advanced ID Part 1				
Wed 10/19	1-1:50	Lecture 9	Vancomycin & Aminoglycosides Dosing Clinical Kinetics	Abdelhakiem
	2-2:50	Lecture 10	Vancomycin & Aminoglycosides Dosing Clinical Kinetics	Abdelhakiem
Thu 10/20	1-1:50	Lecture 11	Vancomycin & Aminoglycosides Dosing Clinical Kinetics	Abdelhakiem
	2-2:50	Lecture 12	Vancomycin & Aminoglycosides Dosing Clinical Kinetics	Abdelhakiem
Week 3				
Mon 10/24	1-1:50	Lecture 13	Complicated SSTIs (necrotizing soft tissue infections & diabetic foot infections) Pharmacotherapy	Abdelhakiem
	2-2:50	Lecture 14	Complicated SSTIs (necrotizing soft tissue infections & diabetic foot infections) Pharmacotherapy	Abdelhakiem
Tue 10/25	1-1:50	Lecture 15	Osteomyelitis and prosthetic joint infections Pharmacotherapy	Abdelhakiem
	2-2:50	Lecture 16	Osteomyelitis and prosthetic joint infections Pharmacotherapy	Abdelhakiem
Module 3: Advanced ID Part 2				
Wed 10/26	1-1:50	Lecture 17	Infective Endocarditis Pharmacotherapy	Medlin
	2-2:50	Lecture 18	Infective Endocarditis Pharmacotherapy	Medlin
Module 1 Exam | 3:00 - 4:50pm | Campbell Building Room 211				
Thu 10/27	1-1:50	Lecture 19	Bloodstream and Catheter Infections Pharmacotherapy	Medlin
	2-2:50	Lecture 20	Dental Prophylaxis Pharmacotherapy	Sanchez
Week 4				
Mon 10/31	1-1:50	Lecture 21	HAP/VAP (including Special Populations) Pharmacotherapy	Medlin
	2-2:50	Lecture 22	HAP/VAP (including Special Populations) Pharmacotherapy	Medlin
Tue 11/1	1-1:50	Lecture 23	Meningitis (including Special Populations) Pharmacotherapy	Medlin
	2-2:50	Lecture 24	Meningitis (including Special Populations) Pharmacotherapy	Medlin
	1-1:50	Lecture 25	Clostridioides difficile infection *Pharmacotherapy*	Medlin

Wed 11/2	2-2:50	Lecture 26	Clostridioides difficile infection *Pharmacotherapy*	Medlin
Module 2 Exam | 3:00 - 4:50pm | Campbell Building Room 211				
Thu 11/3	1-1:50	Lecture 27	Intra-abdominal infections Pharmacotherapy	Sanchez
	2-2:50	Lecture 28	Intra-abdominal infections Pharmacotherapy	Sanchez
Week 5				
Mon 11/7	1-1:50	Lecture 29	Surgical Infection Prophylaxis Pharmacotherapy	Medlin
	2-2:50	Lecture 30	Module 3 Review	Medlin/Sanchez
Module 4: Advanced ID Part 3				
Tue 11/8	1-1:50	Lecture 31	Invasive Fungal Infections Pharmacotherapy	Abdelhakiem
	2-2:50	Lecture 32	Tuberculosis Pharmacology	Abdelhakiem
Wed 11/9	1-1:50	Lecture 33	Tuberculosis Pharmacology	Abdelhakiem
	2-2:50	Lecture 34	Tuberculosis Medicinal Chemistry	Weston
Module 3 Exam | 3:00 - 4:50pm | Campbell Building Room 211				
Thu 11/10	1-1:50	Lecture 35	***asynchronous*** Tuberculosis Pharmacotherapy	Abdelhakiem
	2-2:50	Lecture 36	***asynchronous*** Tuberculosis Pharmacotherapy	Abdelhakiem
Week 6				
Mon 11/14	1-1:50	Lecture 37	Viral Hepatitis (A, B, C) Pharmacology	Sanchez
	2-2:50	Lecture 38	Viral Hepatitis (A, B, C) Pharmacology	Sanchez
Tue 11/15	1-1:50	Lecture 39	Viral Hepatitis (A, B, C) Medicinal Chemistry	Weston
	2-2:50	Lecture 40	Viral Hepatitis (A, B, C) Pharmacotherapy	Sanchez
Wed 11/16	1-1:50	Lecture 41	Viral Hepatitis (A, B, C) Pharmacotherapy	Sanchez
	2-2:50	Lecture 42	Module 4 Review	Sanchez/Abdelhakiem/Weston
Module 5: HIV Part 1				
Thu 11/17	1-1:50	Lecture 43	HIV Pharmacology	Sanchez
	2-2:50	Lecture 44	HIV Pharmacology	Sanchez
Week 7				
Mon 11/21	1-1:50	Lecture 45	HIV Medicinal Chemistry	Weston
	2-2:50	Lecture 46	HIV Pathophysiology	Medlin
Tue 11/22	1-1:50	Lecture 47	HIV Pathophysiology	Medlin
	2-2:50	Lecture 48	HIV Pharmacotherapy	Medlin
Wed 11/23	1-1:50	Lecture 49	HIV Pharmacotherapy	Medlin
	2-2:50	Lecture 50	HIV Pharmacotherapy	Medlin
Module 4 Exam | 3:00 - 4:50pm | Campbell Building Room 211				
Thu 11/24	**No Class: Thanksgiving Holiday**			
Week 8	**Module 6: HIV Part 2**			
Mon 11/28	1-1:50	Lecture 51	HIV Pharmacogenomics & Resistance	Medlin
	2-2:50	Lecture 52	HIV PEP & PrEP Pharmacotherapy	Sanchez
Tue 11/29	1-1:50	Lecture 53	HIV PEP & PrEP Pharmacotherapy	Sanchez
	2-2:50	Lecture 54	HIV Complications and Opportunistic Infections Pharmacotherapy	Medlin
Wed 11/30	1-1:50	Lecture 55	HIV Complications and Opportunistic Infections Pharmacotherapy	Medlin
	2-2:50	Lecture 56	Module 5 Review	Sanchez/Weston/Medlin
Module 5 Exam | 3:00 - 4:50pm | Campbell Building Room 211				
Thu 12/1	1-1:50	Lecture 57	**Final Exam Review**	
	2-2:50	Lecture 58		
Final Exam (Module 6 + Comprehensive) | 3:00-5:45pm | Campbell Building Room 211				