

PHA5782C: Patient Care 2 – Introduction to Infectious Disease and Oncology
 Fall 2025 | 6 Credit Hours – [A-E Grading]

Second 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. Learning occurs through team-based learning. The content in this course will lay the foundation for the subsequent patient care series where the pharmacology and medicinal chemistry of anti-infective and oncology agents and pharmacotherapy of infectious diseases and oncology will be learned and applied to optimize patient-centered care. 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 infectious diseases, hematologic and oncology disorders.

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

Course Corequisites: PHA 5163L Professional Practice Skills Lab 3

Course Faculty and Staff

Course Directors	
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Instructional Designer	
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[Faculty and Staff: Who to Contact and Questions to Ask](#)

Office Hours: Please see the Canvas course site for posted office hours.

Faculty Locations:

Gainesville	PTR: MSB 0445, PG-22 PEP: HPNP 2336 POP: DSIT 5th floor	CSP: MSB P2-29 MC: MSB P3-12
Jacksonville	Tower 2, First Floor	
Orlando	UFRAC 420	

Course Objectives and Educational Outcomes	
Course Objectives	Linked Educational Outcome
Associate the role of the normal human microbiota with the prevention of disease.	Learner
Describe the pathogenesis of bacterial and viral infections.	Learner
Interpret microbiological, immunological, and virological laboratory data in the context of a patient's clinical presentation and findings.	Learner Provider
Given a case of a patient with infectious disease and/or oncology disorders/pharmacotherapy needs, 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 and analyze the data in order to understand the relevant medical/medication history and clinical status of the patient. <ol style="list-style-type: none"> 1. Subjective and objective information is collected through comprehensive medication review with the patient, 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. 	Communicator Problem-Solver

Course Objectives and Educational Outcomes

Course Objectives	Linked Educational Outcome
<p>ii. Assess: Assess the information collected and formulate a problem list consisting of the patient's active medical problems and medication therapy problems in order to prioritize medication therapy recommendations to achieve the patient's overall health goals.</p> <ol style="list-style-type: none"> 1. Assess the patient's active medical conditions taking into account clinical and patient goals of therapy. 2. Assess the indication, effectiveness, safety, adherence and convenience (administration, access, affordability) of each medication the patient is taking. 3. Include in the assessment an evaluation of risk factors, relevant psychosocial issues, and the need for preventative care or for referral to another healthcare practitioner for further evaluation 4. Formulate a medication therapy problem list, classifying the patient's medication therapy problems based on indication, effectiveness, safety, and compliance. 5. Prioritize the patient's medication therapy problems. 	<p>Provider Steward</p>
<p>iii. Plan: Develop an individualized patient-centered care plan in collaboration with other health care professionals and the patient/caregiver that is evidence-based and as affordable as possible.</p> <ol style="list-style-type: none"> 1. For each problem, create patient-centered goal(s) in collaboration with the patient/caregiver and other members of the healthcare team 2. Develop a care plan to manage the patient's active medical conditions and resolve the identified medication therapy problems. 3. Identify monitoring parameters to assess effectiveness, safety, adherence, and quality of life. 	<p>Learner Provider Problem-Solver Advocate</p>
<p>iv. Implement: Implement the care plan in collaboration with other health care professionals and the patient/caregiver.</p> <ol style="list-style-type: none"> 1. For each condition and associated recommended strategy for resolving identified MTPs, provide the medication order in its entirety, including full drug name, dose, dosage form, route of administration, dosing interval, duration of therapy <ol style="list-style-type: none"> a. Discuss the care plan with the patient. b. Educate the patient on his/her medications (which may include explanations of medication action, the regimen or its proper discontinuation, proper medication use and storage, expected results and when to expect them, possible adverse effects, and when and how to follow-up or seek additional care. 2. Where appropriate, contribute to coordination of care by providing documentation to other providers using an evidence-based method of communication, such as SBAR (Situation, Background, Assessment, Recommendation) or SOAP (Subjective, Objective, Assessment, Plan) 	<p>Problem-Solver Provider Communicator Advocate</p>

v. Follow-up with the Patient: Monitor and evaluate the effectiveness of the care plan and modify the plan in collaboration with other health care professionals and the patient/caregiver.	Provider Problem-Solver Collaborator Communicator
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Course Resources and Fees

Course Outline

See Appendix A. 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.

Required Textbooks/Readings

1. Karen C. Carroll, Stephen A. Morse, Timothy Mietzner, Steve Miller. Jawetz, Melnick, & Adelberg’s Medical Microbiology, McGraw-Hill, 28th edition, 2019, ISBN 978-1-260-01202-6.
 - Available via HSC Library – Access Pharmacy
2. Brunton L, Hilal-Dandan R, Knollmann BC, eds. Goodman and Gilman’s The Pharmacological Basis of Therapeutics, McGraw-Hill Professional, New York, NY, 14th Edition, 2023.
 - Available via HSC Library – Access Pharmacy
3. DiPiro JT, Yee GC, Posey LM, Haines ST, Nolin TD, Ellingrod V. Pharmacotherapy – A Pathophysiologic Approach. McGraw-Hill Professional, New York, NY, 12th Edition, 2023
 - Available via HSC Library – Access Pharmacy
4. Primary literature readings will be posted in Canvas.

Use [UF VPN to access UF Libraries Resources](#) when off-campus. The UF HSC library staff can assist you with questions or issues related to accessing online library materials. For assistance contact your College of Pharmacy librarian or visit the [HSC Library Website](http://www.library.health.ufl.edu/) at this URL:<http://www.library.health.ufl.edu/>

Suggested Textbooks/Readings

Suggested readings will be posted on Canvas.

Other Required Learning Resources

EHR Go

- *EHR Go* is an educational EHR used throughout the PharmD curriculum. Students will be expected to purchase a subscription to this program.
- Create your *EHR Go* account by going to: <https://ehrgo.com/> Select **Subscribe** in the upper, right corner and enter the following Pharmacy Student Program Key: **See syllabus posted in Canvas**
- Follow the on-screen instructions to create your account and apply your subscription. Refer to the Skills Labs Canvas site for more detailed information.

NOTE:

- 2PDs are encouraged to purchase a 2-year Student Subscription
- 3PDs are encouraged to purchase an Academic Year Student Subscription

Materials & Supplies Fees

None

Evaluation and Grading

Student Evaluation & Grading

The Canvas© gradebook will be set-up using the percentages below to compute the grade.

Assessment Item	Grade Percentage
iRAT (n=9; single lowest score dropped; 1% each after drop)	8%
tRAT (n=9; 0.88% each)	8%
Urinary Tract Infection In-Class Individual Assignment (ALS #2)	2%
Skin/Soft Tissue In-Class Individual Assignment (ALS#6)	4%
Capstone (See Appendix B)	9%
Exam 1 (Modules 1 & 2)	23%
Exam 2 (Modules 3 & 4)	23%
Exam 3 (Modules 5 & 6)	23%
Total	100%

Grading Scale

Percentage	Letter Grade	Percentage	Letter Grade	Percentage	Letter Grade
92.50-100%	A	79.50-82.49%	B-	66.50-69.49%	D+
89.50-92.49%	A-	76.50-79.49%	C+	62.50-66.49%	D
86.50-89.49%	B+	72.50-76.49%	C	59.50-62.49%	D-
82.50-86.49%	B	69.50-72.49%	C-	< 59.50%	E

Rounding of grades:

Final grades in Canvas will be rounded to the 2nd decimal place. If the decimal is X.495 or higher, Canvas will round the grade to X.50. The above scale depicts this policy and grades are determined accordingly. Grade assignment is made using this policy and NO EXCEPTIONS will be made in situations where a student's grade is "close."

University of Florida Honor Pledge and Academic Dishonesty

UF students are bound by The Honor Pledge which states "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor 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."

The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Expectations for Artificial Intelligence and when use constitutes academic dishonesty is outlined below.

Tendering information (giving your work to another to be copied, giving someone answers to assessment questions, informing another person in a later section about the questions that appear on an assessment that you have taken, or giving or selling a paper to another student), is considered academic dishonesty.

Students are required to report any condition that facilitates academic misconduct to appropriate personnel. Failure to report is also considered academic dishonesty. If you have any questions or concerns, please consult the course's Teaching Partnership Leader/Course Director or Assistant Dean for Curricular Affairs.

University of Florida Honor Pledge and Academic Dishonesty

See the [UF Conduct Code website](#) for more information. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Assignment Descriptions

Individual Assignment: Urinary Tract Infection in ALS #2

Students will evaluate a patient case involving urinary tract infection, applying clinical knowledge to answer multiple-choice questions and dosage calculations. This activity emphasizes appropriate antimicrobial selection, consideration of drug structure–activity relationships and patient-centered decision-making.

Individual Assignment: Skin/Soft Tissue in ALS #6

Students will review a soft skin and tissue infection case, using critical thinking to respond to multiple-choice questions and relevant pharmacokinetic calculations. This activity emphasizes appropriate antimicrobial selection, consideration of drug structure–activity relationships, and patient-centered decision-making.

Individual Self-Assessments

Students are encouraged to complete individual self-assessments in Canvas for each module. The questions are quiz-level and authored by the course faculty.

Facilitated Case Discussion

In this introductory facilitated case discussion session that is ungraded, students will be divided into groups, each with a designated faculty facilitator. Before the session, students will receive a patient case with related questions to complete. During the discussion, the facilitator will ask individual students questions related to the case, both the questions provided before the session as well as others, encouraging active participation and critical thinking. There will be more facilitated case discussions in upcoming patient care courses that will count for a portion of the final grade.

Course-Related Policies

UF Resources and Policies

University of Florida resources and policies can be found at this URL: <https://go.ufl.edu/syllabuspolicies>

PharmD Course Policies

The Policies in the following link apply to this course. Review the General [Pharm.D. Course Policies](#) carefully, at this URL: <http://curriculum.pharmacy.ufl.edu/current-students/course-policies/>

Attendance Policy

Attendance is mandatory for active learning sessions such as team-based learning sessions, case discussions, laboratory sessions, and other activities that the instructor designates as required. This course has 13 required sessions (ALS, Facilitated Case Discussions). Pre-Exam Review ALS's (#4, #12, and #16 are optional attendance). A student who misses greater than 3 required session(s) for this course will receive an incomplete in the course and will retake the course during the next offering, resulting in delayed graduation.

Makeup Assignments

This course has two in-class individual assignments - a) UTI and b) SSTI. For students with an excused absence when in-class individual assignments are due, makeup work is due by 11:59 PM 1 week from return to class date. In the case of any late or missing assignments, these will be scored as zero and a lapse will be entered. Specific information and directions for the makeup assignment(s) will be in Canvas. The makeup assignment will be a closed-book assessment and may consist of multiple-choice questions, written responses, and/or a verbal discussion with one of the course instructors.

Late Assignments

Late or missing assignments will receive a 0 and a lapse will be entered.

Course-Related Policies

Educational Technology Use

The following technology below will be used during the course and the student must have the appropriate technology and software.

1. ExamSoft™ Testing Platform
2. Canvas™ Learning Management System

For technical support, navigate to [Educational Technology and IT Support Contact Information](http://curriculum.pharmacy.ufl.edu/current-students/technical-help/) at this URL: <http://curriculum.pharmacy.ufl.edu/current-students/technical-help/>

Artificial Intelligence Use

The use of generative AI in assessments is prohibited, unless explicitly allowed by the course instructor. Assessments include any submitted work, graded or ungraded, that will be evaluated. These include, but are not limited to, quizzes, exams, assignments, writing projects, etc. If a student is uncertain about the use of AI technology, it is the student's responsibility to ask the instructor prior to beginning the assignment or assessment.

When authorized by the course director/course instructors, students may use AI technologies in the completion of an assessment if they acknowledge all use by naming the technology, describing how it was employed, and adhering to any other requirement stipulated in the assessment's instructions. Failure to acknowledge the use of AI technology or disregarding instructions related to the use of AI for assessments is considered academic misconduct. Students must disclose the use of AI and AI-assisted technologies by following the instructions below.

Application of AI technology must be done with human oversight and control, and students should carefully review and edit the result, as AI can generate outputs that can be incorrect, incomplete, or biased. **Students assume full responsibility for all content, including errors and omissions, if AI is employed.** Additionally, privacy is a concern with AI-generated content. Most commercially available AI systems are not compliant with [HIPAA](#) or FERPA protections, inputting patient or student information is prohibited by federal law.

Instructions to acknowledge the use of AI:

Statement: During the preparation of this assignment I/we, [INSERT NAME/S], used [INSERT TOOL / SERVICE] in order to [INSERT REASON OR PURPOSE]. After using this tool/service, I/we reviewed and edited the content as needed and take full responsibility for the content of the submission.

Penalties for unauthorized use:

Unauthorized use of AI text generators for assessments is considered evidence of academic dishonesty (see [policy on academic dishonesty](#)).

Disability Resource Center

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. See the [Get Started with the DRC webpage](#) on the Disability Resource Center site. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online. Students can complete evaluations in three ways:

1. The email they receive from GatorEvals,
2. Their Canvas course menu under GatorEvals, or
3. The central portal at <https://my-ufl.bluera.com>

Guidance on how to provide constructive feedback is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>

Appendix A: Course Outline

Date / Time [Recommended for Independent Study]	Mod #	Activity	Activity Title	Contact Time (min)	Responsible
08/11/25	0	Optional/ Supplemental	Patient Care 2 Introduction		Anthony Casapao, David DeRemer
	1	Module	Module 1: Laboratory Diagnostics and Introduction to Infectious Diseases		Veena Venugopalan
	1.1	Unit	Introduction to Medical Microbiology		Veena Venugopalan
08/11/25	1.1.1	Lecture Video	Introduction to Microbiology (Part 1 and Part 2)	31	Veena Venugopalan
08/11/25	1.1.2	Lecture Video	Diagnosing Bacterial Infections – Blood Cultures	22	Veena Venugopalan
08/11/25	1.1.3	Lecture Video	Diagnosing Bacterial Infections – Respiratory	12	Veena Venugopalan
08/11/25	1.1.4	Lecture Video	Diagnosing Bacterial Infections – Urine Cultures	20	Veena Venugopalan
08/11/25	1.1.5	Lecture Video	Diagnosing Bacterial Infections – Wound	14	Veena Venugopalan
08/11/25	1.1.6	Lecture Video	Interpreting Bacterial Susceptibilities	40	Veena Venugopalan
08/11/25	1.1.7	Lecture Video	Rapid Diagnostic Testing and Infectious Diseases	45	Kate DeSear
	1.2	Unit	Introduction to Infectious Diseases and Pharmacokinetics/Pharmacodynamics		Anthony Casapao, Nicole Maranchick
08/11/25	1.2.1	Lecture Video	Introduction to Infectious Diseases	57	Kate DeSear
08/11/25	1.2.2	Lecture Video	Antimicrobial Stewardship	42	Kate DeSear
08/12/25	1.2.3	Lecture Video	Introduction to Pharmacokinetics and Pharmacodynamics	31	Nicole Maranchick
	1	Optional/Sup plemental	Module 1 Self-Assessment Questions		Anthony Casapao
	2	Module	Module 2: Principles of Important Gram Negative Bacteria and Antimicrobials		Anthony Casapao
	2.1	Unit	Principles of Gram Negative Bacteria I		Anthony Casapao
08/12/25	2.1.1. 1	Lecture Video	Interactions of Bacteria with the Immune System: Review of Immunology	10	Erin Bruce
08/12/25	2.1.1. 2	Lecture Video	Interactions of Bacteria with the Immune System: Gram (+) vs. Gram (-) Bacteria	8	Erin Bruce
08/12/25	2.1.1. 3	Lecture Video	Interactions of Bacteria with the Immune System: Extracellular Bacteria	5	Erin Bruce
08/12/25	2.1.1. 4	Lecture Video	Interactions of Bacteria with the Immune System: Extracellular Bacteria Immune System Evasion	12	Erin Bruce

Date / Time [Recommended for Independent Study]	Mod #	Activity	Activity Title	Contact Time (min)	Responsible
08/12/25	2.1.1.5	Lecture Video	Interactions of Bacteria with the Immune System: Intracellular Bacteria	8	Erin Bruce
08/12/25	2.1.1.6	Lecture Video	Interactions of Bacteria with the Immune System: Intracellular Bacteria Immune System Evasion	4	Erin Bruce
08/12/25	2.1.2	Lecture Video	Enterobacterales Overview	15	Anthony Casapao
08/12/25	2.1.3	Lecture Video	Escherichia	13	Anthony Casapao
08/12/25	2.1.4	Lecture Video	Klebsiella	7	Anthony Casapao
08/12/25	2.1.5	Lecture Video	Enterobacter, Citrobacter, and Serratia	10	Anthony Casapao
08/12/25	2.1.6	Lecture Video	Other Important Enterbacterales	15	Anthony Casapao
08/12/25	2.1.7	Lecture Video	Non-fermenters: Pseudomonas aeruginosa	23	Barbara Santevecchi
08/12/25	2.1.8	Lecture Video	Non-fermenters: Acinetobacter baumannii	23	Barbara Santevecchi
08/12/25	2.1.9	Lecture Video	Non-fermenters: Stenotrophomonas maltophilia; Burkholderia cepacia	10	Anthony Casapao
	2.2	Unit	Pharmacology and Medicinal Chemistry of Antimicrobials, Part 1		Veena Venugopalan
08/12/25	2.2.1	Lecture Video	Natural and Antistaphylococcal Penicillins	41	Barbara Santevecchi
08/12/25	2.2.2	Lecture Video	Extended Spectrum Penicillins	31	Barbara Santevecchi
08/13/25	2.2.3	Lecture Video	1st, 2nd, and 3rd generation cephalosporins	32	Barbara Santevecchi
08/13/25	2.2.4	Lecture Video	Antipseudomonal and Antistaphylococcal Cephalosporins	41	Barbara Santevecchi
08/13/25	2.2.5	Lecture Video	Carbapenems	29	Barbara Santevecchi
08/13/25	2.2.6	Lecture Video	Monobactams	14	Barbara Santevecchi
08/13/25	2.2.7	Lecture Video	Medicinal Chemistry of Beta-lactams	39	Jessica Mamallapalli
08/13/25	2.2.8	Lecture Video	Aminoglycosides	25	Veena Venugopalan
08/13/25	2.2.9	Lecture Video	PK of Aminoglycosides	33	Veena Venugopalan
08/13/25	2.2.10	Lecture Video	Medicinal Chemistry of Aminoglycosides	31	Jessica Mamallapalli
08/13/25	2.2.11	Lecture Video	Fluoroquinones	34	Kate DeSear
08/13/25	2.2.12	Lecture Video	Medicinal Chemistry of Fluoroquinoline Antibacterial Agents	28	Jessica Mamallapalli
08/14/25	2.2.13	Lecture	Sulfonamides	17	Veena Venugopalan

Date / Time [Recommended for Independent Study]	Mod #	Activity	Activity Title	Contact Time (min)	Responsible
		Video			
08/14/25	2.2.14	Lecture Video	Urinary agents - Fosfomycin	16	Veena Venugopalan
08/14/25	2.2.15	Lecture Video	Urinary agents - Nitrofurantoin	14	Veena Venugopalan
08/14/25	2.2.16	Lecture Video	Penicillin Allergy	37	Barbara Santevecchi
08/18/2025 from 1pm-2:50pm	1.1- 2.2	Active Learning Session	Active Learning Session 1: Gram Negatives (2 hours)	100	Anthony Casapao, Erin Bruce, Kate DeSear, Veena Venugopalan
	1.1- 2.2	Quiz (iRAT/tRAT)	iRAT/tRAT during ALS 1		Anthony Casapao, Veena Venugopalan
	2.3	Unit	Uncomplicated Urinary Tract Infection		Veena Venugopalan
08/14/25	2.3.1	Lecture Video	UTI	48	Veena Venugopalan
	2	Optional/Sup plemental	Module 2 Self-Assessment Questions		Anthony Casapao
	2	Assignment (Ungraded)	ALS 2 Pre-Class Aminoglycoside PK Assignment		Veena Venugopalan
08/20/2025 from 10am-11:50am	1.1- 2.2	Active Learning Session	Active Learning Session 2 : UTI Part 1 (2 hours)	100	Jessica Mamallapalli, Veena Venugopalan
In-Class	2.1 - 2.3	Assignment (Graded)	Urinary Tract Infection In-Class Individual Assignment (ALS #2)		Veena Venugopalan
	1.1- 2.3	Quiz (iRAT/tRAT)	iRAT/tRAT during ALS 2		Anthony Casapao, Veena Venugopalan
08/20/2025 from 1pm-2:50pm	1.1- 2.3	Active Learning Session	Active Learning Session 3: UTI Part 2 (2 hours)	100	Jessica Mamallapalli, Veena Venugopalan
08/21/2025 from 9am-9:50am	1-2	Active Learning Session -- Zoom	ALS 4: Optional Pre-Exam Review (1 hour)		Anthony Casapao, Barbara Santevecchi, Veena Venugopalan
08/22/2025 from 9am-11am	1-2	Exam	Exam 1: Modules 1-2 (2hr)	2	Anthony Casapao
	3	Module	Module 3: Principles of Gram Positive Bacteria with other Gram Negative Bacteria and Antimicrobials		Anthony Casapao
	3.1	Unit	Principles of Gram Positive Bacteria		Veena Venugopalan
08/25/25	3	Reading (Web)	Read: Medical Microbiology Chapter 11: subsections on B. cereus, C. botulinum, C. tetani, and C. difficle	30	Veena Venugopalan
08/25/25	3	Reading (Web)	Read: Medical Microbiology Chapter 12: subsection on "Lipophilic Corynebacteria"	15	Veena Venugopalan

Date / Time [Recommended for Independent Study]	Mod #	Activity	Activity Title	Contact Time (min)	Responsible
08/25/25	3	Reading (Web)	Read: Medical Microbiology Chapter 21: subsections on "physiology and growth conditions for anaerobes", "the polymicrobial nature of anaerobic infections", and "diagnosis of anaerobic infections"	15	Veena Venugopalan
08/25/25	3.1.1	Lecture Video	Staphylococci	25	Veena Venugopalan
08/25/25	3.1.2	Lecture Video	Streptococci Overview	8	Anthony Casapao
08/25/25	3.1.3	Lecture Video	Streptococcus pyogenes	9	Anthony Casapao
08/25/25	3.1.4	Lecture Video	Streptococcus pneumoniae	11	Anthony Casapao
08/25/25	3.1.5	Lecture Video	Other Streptococci species	8	Anthony Casapao
08/25/25	3.1.6	Lecture Video	Enterococcus	11	Anthony Casapao
08/25/25	3.1.7	Lecture Video	Bacillus species	9	Anthony Casapao
08/25/25	3.1.8	Lecture Video	Listeria & Corynebacterium	10	Anthony Casapao
08/25/25	3.1.9	Lecture Video	Clostridium spp	22	Veena Venugopalan
	3.2	Unit	Principles of Gram Negative Bacteria II		Veena Venugopalan
08/26/25	3.2.1	Lecture Video	Pleomorphic bacteria - Haemophilus species	24	Barbara Santevecchi
08/26/25	3.2.2	Lecture Video	Pleomorphic bacteria - Bordetella pertussis	12	Barbara Santevecchi
08/26/25	3.2.3	Lecture Video	Helicobacter pylori	12	Barbara Santevecchi
08/26/25	3.2.4	Lecture Video	Neisseria	23	Barbara Santevecchi
08/26/25	3.2.5	Lecture Video	Chlamydia	13	Barbara Santevecchi
08/26/25	3.2.6	Lecture Video	Mycoplasma	11	Barbara Santevecchi
08/26/25	3.2.7	Lecture Video	Legionella	12	Barbara Santevecchi
08/26/25	3.2.8	Lecture Video	Gram-Negative Anaerobes	9	Anthony Casapao
08/26/25	3.2.9	Lecture Video	Mycobacterium	26	Eric Free Egelund
	3.3	Unit	Pharmacology and Medicinal Chemistry of Antimicrobials, Part II		Veena Venugopalan
08/27/25	3.3.1	Lecture Video	Glycopeptides	13	Veena Venugopalan
08/27/25	3.3.2	Lecture Video	Glycopeptides PK	34	Nicole Maranchick
08/27/25	3.3.3	Lecture	Lipoglycopeptides	26	Kate DeSear

Date / Time [Recommended for Independent Study]	Mod #	Activity	Activity Title	Contact Time (min)	Responsible
		Video			
08/27/25	3.3.4	Lecture Video	Medicinal Chemistry of Glycopeptide and Lipopeptide Antibiotics	27	Jessica Mamallapalli
08/27/25	3.3.5	Lecture Video	Daptomycin	11	Veena Venugopalan
08/27/25	3.3.6	Lecture Video	Oxazolidinones	15	Veena Venugopalan
08/27/25	3.3.7	Lecture Video	Tetracyclines and Glycylcyclines	41	Kate DeSear
08/27/25	3.3.8	Lecture Video	Medicinal Chemistry of Tetracycline Antibiotics	25	Jessica Mamallapalli
08/27/25	3.3.9	Lecture Video	Medicinal Chemistry of Macrolide Antibiotics	24	Jessica Mamallapalli
08/27/25	3.3.10	Lecture Video	Macrolides	29	Kate DeSear
08/27/25	3.3.11	Lecture Video	Clindamycin	12	Veena Venugopalan
08/27/25	3.3.12	Lecture Video	Metronidazole	9	Veena Venugopalan
08/28/2025 from 8am-9:59am	3.1- 3.3	Active Learning Session	Active Learning Session 5: Gram Positives (2 hours)	100	Anthony Casapao, Barbara Santevecchi, Kate DeSear
	3.1- 3.3	Quiz (iRAT/tRAT)	iRAT/tRAT during ALS 5		Anthony Casapao
	3.4	Unit	Acute Bacterial Skin and Skin Structure Infections		Veena Venugopalan
09/02/25	3.4.1	Lecture Video	Acute Bacterial Skin and Skin Structure Infections	36	Veena Venugopalan
	3.5	Unit	Pharmacotherapy of Surgical Prophylaxis		Bethany Ruth Shoulders
09/02/25	3.5.1	Lecture Video	Pharmacotherapy of Surgical Prophylaxis	27	Bethany Ruth Shoulders
	3.5.2	Reading (Web)	Read: Clinical Practice Guidelines for Antimicrobial Prophylaxis in Surgery -- Tables 1 and 2. Pages 736-740	60	Bethany Ruth Shoulders
09/04/2025 from 10am-11:50am	3.1- 3.5	Active Learning Session	Active Learning Session 6 : Skin/Soft Tissue Infection Part 1 (2 hours)	100	Jessica Mamallapalli, Nicole Maranchick, Veena Venugopalan
	3.1- 3.5	Quiz (iRAT/tRAT)	iRAT/tRAT during ALS 6		Anthony Casapao
In-Class	3.1- 3.4	Assignment (Graded)	Skin/Soft Tissue In-Class Individual Assignment (ALS#6)		Veena Venugopalan
09/04/2025 from 1pm-2:50pm	3.1- 3.5	Active Learning Session	Active Learning Session 7: Skin/Soft Tissue Infection Part 2 - Surgical Prophylaxis (2 hours)	100	Bethany Ruth Shoulders, Jessica Mamallapalli, Nicole Maranchick, Veena Venugopalan

Date / Time [Recommended for Independent Study]	Mod #	Activity	Activity Title	Contact Time (min)	Responsible
	3.6	Unit	Community-acquired Pneumonia		Kalen Manasco
09/04/25	3.6.1	Lecture Video	Community Acquired Pneumonia	40	Kalen Manasco
	3	Optional/Sup plemental	Module 3 Self-Assessment Questions		Anthony Casapao
09/05/2025 frmo 1pm-2:50pm	3.1- 3.6	Active Learning Session	Active Learning Session 8: Community- Acquired Pneumonia Part 1 (2 hours)	100	Jessica Mamallapalli, Kalen Manasco
	3.1- 3.6	Quiz (iRAT/tRAT)	iRAT/tRAT during ALS 8		Anthony Casapao
	4	Module	Module 4: Virology and Antivirals		Lindsey Marie Childs-Kean
	4.1	Unit	Virology		Lindsey Marie Childs-Kean
09/04/25	4.1.1	Video Other	How Influenza Pandemics Occur (Youtube)	3	Lindsey Marie Childs-Kean
09/04/25	4.1.2	Lecture Video	Virology Basics	50	Ashley Brown
09/04/25	4.1.3. 1	Lecture Video	Interaction of Viruses with the Immune System: General Characteristics of Viral Infections	12	Erin Bruce
09/04/25	4.1.3. 2	Lecture Video	Interaction of Viruses with the Immune System: Type-I Interferon and Viral Infections	11	Erin Bruce
09/04/25	4.1.3. 3	Lecture Video	Interaction of Viruses with the Immune System: CD8+ Cytotoxic T cells and Viral Infections	10	Erin Bruce
09/04/25	4.1.3. 4	Lecture Video	Interaction of Viruses with the Immune System: Natural Killer Cells and Viral Infections	5	Erin Bruce
09/04/25	4.1.3. 5	Lecture Video	Interaction of Viruses with the Immune System: Complement Mediated Neutralization of Viral Infections	6	Erin Bruce
09/04/25	4.1.3. 6	Lecture Video	Interaction of Viruses with the Immune System: CD4+ T cells and Antibody Generation	7	Erin Bruce
09/04/25	4.1.3. 7	Lecture Video	Interaction of Viruses with the Immune System: Immune Evasive Strategies of Viruses	22	Erin Bruce
09/05/25	4.1.4	Lecture Video	Influenza	37	Ashley Brown
09/05/25	4.1.5	Lecture Video	HIV	22	Lindsey Marie Childs-Kean
09/05/25	4.1.6	Lecture Video	Hepatitis A, B, and C	30	Lindsey Marie Childs-Kean
09/05/25	4.1.7	Lecture Video	Herpesviruses: Varicella/Zoster, HSV, CMV, Epstein-Barr	35	Lindsey Marie Childs-Kean

Date / Time [Recommended for Independent Study]	Mod #	Activity	Activity Title	Contact Time (min)	Responsible
09/05/25	4.1.8	Lecture Video	Coronaviruses	48	Ashley Brown
09/05/25	4	Reading	Other Clinically Relevant Viruses (Specifics in Canvas)	240	Lindsey Marie Childs-Kean
	4	Optional/Supplemental	"General Properties of Viruses." Jawetz, Melnick, & Adelberg's Medical Microbiology, 28e Eds. Stefan Riedel, et al. McGraw Hill, 2019		Lindsey Marie Childs-Kean
	4	Optional/Supplemental	"Pathogenesis and Control of Viral Diseases." Jawetz, Melnick, & Adelberg's Medical Microbiology, 28e Eds. Stefan Riedel, et al. McGraw Hill, 2019		Lindsey Marie Childs-Kean
09/08/2025 from 10am-11:50am	4.1.1-4.1.8 and readings	Active Learning Session	Active Learning Session 9: Virology (2 hours)	100	Ashley Brown, Erin Bruce, Lindsey Marie Childs-Kean
	4.1.1-4.1.8 and readings	Quiz (iRAT/tRAT)	iRAT/tRAT during ALS 9		Lindsey Marie Childs-Kean
	4.2	Unit	Antivirals		Lindsey Marie Childs-Kean
09/09/25	4.2.1.1	Lecture Video	Pharmacology of Antivirals Part 1: Anti-Herpesvirus	36	Kalen Manasco
09/09/25	4.2.1.2	Lecture Video	Pharmacology of Antivirals Part 2: Anti-Influenza Agents	27	Kalen Manasco
09/09/25	4.2.2	Lecture Video	Medicinal Chemistry of Antivirals	44	Xingui Liu
09/09/25	4.2.3	Lecture Video	Therapeutics of Antivirals	36	Lindsey Marie Childs-Kean
09/09/25	4	Optional/Supplemental	Module 4 Self-Assessment Questions		Lindsey Marie Childs-Kean
09/10/2025 from 10am-10:50am	4.2.1-4.2.3	Active Learning Session	Active Learning Session 10: Antivirals Part 1 (1 hour)	50	Kalen Manasco, Lindsey Marie Childs-Kean, Xingui Liu
09/10/25	4.2.1-4.2.3	Quiz (iRAT/tRAT)	iRAT/tRAT during ALS 10		Lindsey Marie Childs-Kean
09/10/2025 from 1pm-1:50pm	4.1.1-4.2.3	Facilitated Case Discussion	Active Learning Session 11: Antivirals Part 2 - Small Group Facilitated Case Discussion (1 hour) via Zoom	50	Anthony Casapao, Barbara Santevecchi, Kalen Manasco, Lindsey Marie Childs-Kean, Veena Venugopalan

Date / Time [Recommended for Independent Study]	Mod #	Activity	Activity Title	Contact Time (min)	Responsible
09/10/2025 from 2pm-2:50pm	3-4	Active Learning Session -- Zoom	ALS 12: Pre-Exam Review (Zoom 1 hour)		Anthony Casapao, Ashley Brown, Bethany Ruth Shoulders, Kalen Manasco, Lindsey Marie Childs-Kean, Nicole Maranchick, Veena Venugopalan
09/12/2025 from 9am-11am	3-4	Exam	Exam 2: Modules 3-4 (2hr)	2	David DeRemer
	5	Module	Module 5: Antifungals		Lindsey Marie Childs-Kean
09/12/25	5.1	Lecture Video	Candida spp	15	Barbara Santevecchi
09/12/25	5.2	Lecture Video	Candida diagnostics	10	Veena Venugopalan
09/12/25	5.3	Lecture Video	Pharmacology of Antifungals	43	Lindsey Marie Childs-Kean
09/12/25	5.4	Lecture Video	Medicinal Chemistry of Antifungals	64	Yousong Ding
09/12/25	5.5	Lecture Video	Therapeutics of Antifungals	32	Lindsey Marie Childs-Kean
	5	Optional/Supplemental	Module 5 Self-Assessment Questions		Lindsey Marie Childs-Kean
09/15/2025 from 10am-11:50am	5.1 - 5.5	Active Learning Session	Active Learning Session 13: Antifungals (2 hours)	100	Lindsey Marie Childs-Kean, Yousong Ding
	5.1 - 5.5	Quiz (iRAT/tRAT)	iRAT/tRAT during ALS 13		Lindsey Marie Childs-Kean
	6	Module	Module 6: Basic Principles of Cancer Treatment		David DeRemer
	6.1	Unit	Introduction to Cancer Care		David DeRemer
09/16/25	6.1	Lecture Video	Introduction to Oncology and Cancer Care	71	David DeRemer
	6.2	Unit	Pharmacology of Anticancer Therapeutics, Part I		David DeRemer
09/16/25	6.2	Lecture Video	Pharmacology of Anticancer Therapeutics Part 1	72	David DeRemer
	6.3	Unit	Pharmacology of Anticancer Therapeutics, Part II		David DeRemer
09/16/25	6.3.1	Lecture Video	Small Molecule Inhibitors/Monoclonal Antibodies	74	David DeRemer
09/16/25	6.3.2	Lecture Video	Cancer Immunotherapy	45	Mei He
	6.4	Unit	Medicinal Chemistry of Oncology Drugs		Xingui Liu
09/17/25	6.4.1	Lecture Video	Medicinal Chemistry of Oncology Drugs, Part 1	58	Xingui Liu

Date / Time [Recommended for Independent Study]	Mod #	Activity	Activity Title	Contact Time (min)	Responsible
09/17/25	6.4.2	Lecture Video	Medicinal Chemistry of Oncology Drugs, Part 2	44	Xingui Liu
	6.5	Unit	Personalized Medicine on Oncology		Jatinder Lamba
09/17/25	6.5	Lecture Video	Personalized Medicine: Oncology	64	Jatinder Lamba
	6.6	Unit	Evidence-based Practice: Superiority RCTs and PROs,		"Patel,Priti"
09/17/25	6.6	Lecture Video	Oncology Trials	30	"Patel,Priti"
	6.7	Unit	Lymphomas		David DeRemer
09/17/25	6.7.1	Lecture Video	Non-Hodgkin Lymphoma	59	David DeRemer
	6.8	Unit	Medicinal Chemistry of Antiemetics		Guangrong Zheng
09/18/25	6.8.1	Lecture Video	Medicinal Chemistry of Antiemetics, Part I	26	Guangrong Zheng
09/18/25	6.8.2	Lecture Video	Medicinal Chemistry of Antiemetics, Part II	23	Guangrong Zheng
	6.9	Unit	Therapeutics of Antiemetics		-
09/18/25	6.9	Lecture Video	Chemotherapy-Induced Nausea and Vomiting (CINV)	67	David DeRemer
	6.10.	Unit	Clinical Applications of Herbal and Dietary Immune Support		Oliver Grundmann
09/18/25	6.10.	Lecture Video	Self-care: Herbal and Dietary Supplements for the Immune System	48	Oliver Grundmann
	6.11	Unit	Facing the Divide: Health Inequities in Cancer		David DeRemer
09/18/25	6.11	Lecture Video	Health Disparities in Cancer Care	44	David DeRemer
09/19/25	6.1- 6.11	Video Other	Oncology Supplemental Questions Overview		David DeRemer
	6.1- 6.11	Optional/Sup plemental	Module 6 Self-Assessment Questions		David DeRemer
09/19/2025 from 10am-11:50am	6.1- 6.11	Active Learning Session	Active Learning Session 14: Lymphoma, Nausea, and Vomiting in the Cancer Patient Part 1 (2 hours)	100	David DeRemer, Guangrong Zheng, "Patel,Priti", Xingui Liu
	6.1- 6.11	Quiz (iRAT/tRAT)	iRAT/tRAT during ALS 14		David DeRemer
09/19/2025 from 1pm-2:50pm	6.1- 6.11	Active Learning Session	Active Learning Session 15: Lymphoma, Nausea, and Vomiting in the Cancer Patient Part 2 (2 hours)	100	David DeRemer, Guangrong Zheng, "Patel,Priti", Xingui Liu
09/19/25		Course Evaluation	Patient Care 2: Course Evaluation		

Date / Time [Recommended for Independent Study]	Mod #	Activity	Activity Title	Contact Time (min)	Responsible
9/22/25 from 10am-10:50am	5-6	Active Learning Session -- Zoom	ALS 16: Pre-Exam Review (1 hour)		David DeRemer, Guangrong Zheng, Oliver Grundmann, "Patel,Priti", Xingui Liu
9/24/25 at 8am		Assignment (Graded)	Capstone Assignment Part 1: Perusal Annotations	70	
9/24/25 at 8am		Assignment (Graded)	Capstone Assignment Part 2: Critical Literature Appraisal (Team Submission in Canvas: PPT)		
09/24/2025 from 8am-12pm	1-6	Active Learning Session	Capstone (4 hours)	200	Anthony Casapao, Kalen Manasco, Lindsey Marie Childs-Kean, Veena Venugopalan
09/26/2025 from 9am-11am	5-6	Exam	Final Exam: Modules 5-6 (2.5 hours)		David DeRemer
			Total Course Hours (hr)	96	

Appendix B: Capstone

Description

This assignment covers antifungals, antivirals, CAP, SSTI and UTI. Each of these categories will have one (1) journal article that is an original research publication. There is an individual graded portion through Perusall (a social annotation tool; this will be accessed through Canvas) and a team graded portion (critical literature appraisal) that will be assessed through a PowerPoint presentation in class. More details will be available in Canvas.

Rubric for Perusall [individual portion] (max of 10 pts)

Category	Yes	No
Annotation content: The content of the comments that students post. A comment should spark a discussion with your peers (point of clarification or highlighting why it is important). Comments must be original and were the initial comment for the discussion. <i>Replies to other team members' comments do not count.</i> (max of 9 points)	One comment was posted in the article (3 pts).	No comments (0 pts given).
	Two comments were posted in the article (6 points).	
	Three comments were posted in the article (9 points)	
Reading the entire document (max of 1 point)	Must access each page or section of the article (1 pt).	Did NOT access each page or section of the article (0 pts).
<i>Extra points are allowed IF full points were not allotted from above.</i>		
Active engagement time: Spending time reading tables, figures, body text, and comments from peers. Using 67 words per minute reading speed as a rule of context.	The time spent actively engaged with the assignment and article (1 pt)	Did NOT meet the minimum time to actively engage with the content. (0 pts)
Getting responses	Your original comment(s) elicited responses from your peers. (1 pt)	Original comment(s) did NOT elicit responses from your peers. (0 pts)

Rubric for Critical Literature Appraisal [team portion] (10 pts total)

	Satisfactory	Acceptable		Unsatisfactory	
	5 pts	4 pts	3 pts	2 pts	0 pts
Format	The presentation includes all of the following: incorporates all provided details: purpose/background, methodology, results, and critique/application	The presentation lacked ONE of the items in detail	The presentation lacked TWO to THREE of the items in detail	The presentation lacked FOUR of the items in detail	The presentation of ALL of the slides was incorrect
Content	The critique and application slide were applicable and plausible. Identify one strength and one weakness of the study. Applied the findings to patient care.	The critique and application slide lacked ONE of the required contents	The critique and application slide lacked TWO of the required contents	The critique and application slide lacked THREE of the required contents	The critique and/or application were/was missing