

Course Syllabus

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 Edit

Department of Physician Assistant Education

Master of Science in Medicine

3 Units

MSM 6200 PHARMACOTHERAPEUTICS I

Course director: Dr. Aileen Chu, PharmD

Term: Spring

Email: achu@pointloma.edu

Meeting day & time: Wednesday

mornings

Meeting location: Balboa campus, in-

person

COURSE DESCRIPTION



This course provides an introduction to the science of pharmacologic therapy of the disease states covered in the Hematology and Oncology, Dermatology, Infectious Disease, Cardiovascular and Pulmonology didactic courses. In addition to pharmacokinetics and pharmacodynamics, students will learn the indications, contraindications, dosages and adverse effects of commonly prescribed medications for these disorders.

COURSE GOALS

The student will be provided:

1. instruction covering pharmacodynamics and pharmacokinetics to provide a basis for the student's understanding of drug classes and their mechanism of action;
2. instruction covering the precautions or contraindications to the use of a drug;
3. the opportunity to use resource materials for determining proper drug usage;
4. the opportunity to practice writing prescriptions and orders.

PROGRAM LEARNING OUTCOMES

The content in this course will contribute to the student's proficiency in this/these area(s):

4. Enter and discuss orders and prescriptions. (MK, IC, PC, PR, PB, SP)
5. Form clinical questions and retrieve evidence to advance patient care. (MK, PC, PR, PB, SP)
6. Collaborate as a member of an inter-professional team. MK, IC, PC, PR, PB, SB

Initials indicate PA core competency required to meet the PLO/CLO. PA Core Competencies:

MK = Medical Knowledge IC = Interpersonal Skills & Communication PC = Patient Care

PR = Professionalism PB = Practice-based Learning SB = Systems-based Practice



COURSE LEARNING OUTCOMES

Successful completion of this course requires demonstration of the skills and knowledge outlined here at, minimally, the ADVANCED BEGINNER level:

1. Discuss pharmacotherapy as it relates to pharmacokinetics, and pharmacodynamics. (MK3, MK4)
2. Discuss common pharmacotherapies utilized in the treatment(s) of disease. (MK3, MK4)
3. Evaluate and manage patient's pharmacological therapies associated with acute and chronic disorders. (PC5, PC6)
4. Integrate the knowledge gained in basic science, clinical medicine, and other PA Program courses to develop clinical pharmacological treatment strategies. (PC5, PC6, PC7, SB3, MK4, MK5, PB1, PB2)

INSTRUCTIONAL OBJECTIVES

Upon completion of the **Pharmacology Basics** section of this course, the student will be able to:

1. Explain how the pharmacokinetic and pharmacodynamic properties of medications translate to their indications for use, dosing and adverse effects. Application, B2.02d
2. Classify drugs according to currently accepted categories. Knowledge, B2.02d

Upon completion of the **Pitfalls in Pharmacotherapy** section of this course, the student will be able to:

1. Anticipate, recognize, and manage adverse effects of drugs including side effects, toxicity, allergies, contraindications, drug-drug and food-drug interactions. Analyze, B2.02d
2. Recognize and correct systems-based factors that could negatively impact therapy. Analyze, B2.02d
3. Identify patient-specific biases and challenges that affect therapeutic decision-making. Comprehension, B2.02d



Upon completion of the **Pharmacotherapy Selection** section of this course, the student will be able to:

1. Integrate pharmacologic knowledge to optimize the medication management of common disease states covered in didactic courses 6100, 6101, 6102, 6103, and 6104. ^{Synthesis, B2.02d}
2. Locate, appraise and integrate evidence from scientific literature to ensure appropriate pharmacotherapy. ^{Application, B2.02d}
3. Apply cost-effective health care and resource allocation principles that do not compromise quality of care. ^{Application, B2.02d}

Upon completion of the **Follow-Up and Adherence** section of this course, the student will be able to:

1. Outline a plan for follow-up and monitoring of medication regimens. ^{Synthesis, B2.02d}
2. Assess effectiveness of the medication regimen in accordance with treatment goals. ^{Evaluation, B2.02d}
3. Provide medication counseling that is appropriate for the patient or caregiver to ensure therapeutic success. ^{Synthesis, B2.02d}

Note: Superscripts identify the Bloom's Taxonomy level for each objective.

UNIT INSTRUCTION

UNIT HOURS LECTURES (subject to minor modifications)

Unit I	11	ORIENTATION
		<ol style="list-style-type: none">1. Introduction to Drug References2. Pharmacodynamics, Drug Receptor Interactions3. Pharmacokinetics



Hematology and Oncology

1. Cancer Chemotherapy
2. Immunotherapy
3. Hematopoietic agents
4. Chemotherapy toxicities

Dermatology

1. Common topical agents
2. Common dermatologic conditions
3. Allergic reactions
- 4.

Infectious Diseases (cont'd)

1. Principles of antimicrobial prescribing
2. Antibacterials
3. Antivirals
4. Antifungals
5. Skin and soft-tissue infections
6. Misc anti-infectives
7. Opportunistic infections in the immunocompromised

Cardiovascular

1. Antihypertensives and hypertension management
2. Endocarditis
3. Antiplatelets and PAD
4. Ischemic heart disease, acute coronary syndrome
5. Anticoagulants and fibrinolytics, venous thromboembolism

Cardiovascular (cont'd)

1. Antiarrhythmics and management of tach- and bradyarrhythmias
2. Atrial fibrillation and flutter

Unit II 17

Unit III 17



3. Shock - inotropes and vasopressors
4. Heart failure

Pulmonology

1. COPD
2. Asthma
3. Vaccines for respiratory conditions
4. Smoking cessation
5. Pneumonia
6. Upper respiratory tract conditions - rhinitis, allergies, infections

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

Note: Texts prefaced with double asterisks are provided in Access Medicine.

- ** Katzung B. *Basic and Clinical Pharmacology*. 14th ed., McGraw-Hill Education; 2018. ISBN13: 978-1259641152
- ** Brunton LL, Hilal-Dandan R, Knollmann BC. eds. *Goodman & Gilman's: The Pharmacological Basis of Therapeutics*, 13e. McGraw Hill; 2017.
- Epocrates – available as mobile app and online (<https://online.epocrates.com> ↗ (<https://online.epocrates.com>))
- Medscape – available as mobile app and online (<https://medscape.com> ↗ (<https://medscape.com>))
- Sanford guide – available as mobile app and online (<https://www.sanfordguide.com> ↗ (<https://www.sanfordguide.com/>)); you should have already subscribed to this resource when learning microbiology in fall semester

LEARNING MODALITIES

Modalities include lectures, reading assignments, and community learning activities. The class schedule and assignments can be found in Canvas.

PLNU ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. However, we recognize that a  you have other life responsibilities and challenges that may interfere. Ultimately you are responsible for your education and your ability to

demonstrate mastery of the course and program objectives.

1. You **MUST** attend:

1. lectures and quizzes having completed pre-class reading assignments
2. examinations on the date and time for which they are schedule

2. We expect

1. active participation in all class activities
2. completion of all class preparatory assignments prior to commencement of class
3. respect for the class, peers and faculty
4. on-time arrival for all classes, laboratories, learning groups or any scheduled activities. Routine tardiness demonstrates a lack of professionalism and will not be tolerated

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Failure to meet the deadline will result in a loss of **10%** each day the assignment is not turned in to the requesting faculty member. Incompletes will only be assigned under extremely unusual circumstances. Students failing an examination or practicum must complete the designated remediation (See REMEDIATION below) within the assigned time.

FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examinations **on their respective scheduled days**. No requests for early examinations or alternative days will be approved.

ASSESSMENT AND GRADING

Quizzes - Faculty will administer frequent quizzes prior to each lecture for each organ system discussed. Advanced reading of the material prior to the lecture is required, and quiz content will be in line with pre-class reading.

Written examinations - MSM 6200 will include three (3) written examinations worth a total of 70% of the overall course grade.

Grading

The final grade will be calculated based on the following distribution:



Quizzes 10%

Written examination I 20%

Written examination II 25%

Written examination III 25%

Course learning interaction 20%

All assignments and evaluations must be completed in the timeframe determined by the course director. Students receiving less than 70% on a quiz or examination must meet with the course instructor and faculty advisor to address remediation. For additional regarding the Remediation Policy refer to the PA Program Student Handbook.

Grading will be in keeping with Point Loma Nazarene University policy for graduate programs and grading will be as follows:

A = 93 to 100	C = 73 to <77
A- = 90 to <93	C- = 70 to <73
B+ = 87 to <90	D+ = 67 to <70
B = 83 to <87	D = 63 to <67
B- = 80 to <83	D- = 60 to <63
C+ = 77 to <80	F = <60

Letter grades will NOT be rounded up; for example, a final grade of 89.89% is considered a B+

REMEDIATION

Remediation is the process by which both the student and the program are assured that performance indicating a deficiency in knowledge or skills is subsequently demonstrated to be satisfactory. This may include a re-test over missed material, a skills demonstration or a review



missed material with completion of corrected answers. It is important to note that this is content remediation, not grade remediation and no grade will be changed based on these activities.

Within 48 hours of the posting of a grade of <70%, the student MUST contact the course director to discuss the student's performance and create a remediation plan. Unless otherwise directed by the course director, remediation activities must be completed within 5 days.

PLNU COPYRIGHT POLICY

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See Academic Policies in the Graduate and Professional Studies Catalog for definitions of kinds of academic dishonesty and for further policy information.

Use of Artificial Intelligence (AI) tools (e.g, ChatGPT, iA Writer, Marmot, Botowski) is not permitted, and use of these tools will be treated as plagiarism.

PLNU ACADEMIC ACCOMMODATIONS POLICY

While all students are expected to meet the minimum standards for completion of this course as established by the instructor, students with disabilities may require academic adjustments, modifications or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center. (DRC@pointloma.edu or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 (a) prohibits discrimination against students with special needs and guarantees all qualified students equal access to a benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will



develop an AP to meet that student's specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

This syllabus is subject to change. Students are encouraged to check course messages and emails in order to remain current.

ARC-PA standards (5th edition) addressed in this course: B2.02(d)

Course Summary:

Date	Details	Due
Wed Jan 11, 2023	 Wk2 Instructor Videos	to do: 11:59pm
Mon May 20, 2024	 Master_MSM6200_Pharmacotherapeutics I (https://canvas.pointloma.edu/calendar?event_id=179895&include_contexts=course_84756)	6pm to 7pm
Tue Jan 13, 2026	 Academic Honesty Verification Statement (https://canvas.pointloma.edu/courses/84756/assignments/1258432) 	due by 11:59pm
	 Orientation to Online Drug References	to do: 11:59pm
Wed Jan 14, 2026	 Quiz Wk 1 (https://canvas.pointloma.edu/courses/84756/assignments/1258443) 	due by 9am



Date	Details	Due
Mon Jan 19, 2026	 Wk 1 Getting Acquainted (https://canvas.pointloma.edu/courses/84756/assignments/1258459) 	due by 11:59pm
Wed Jan 21, 2026	 Quiz Wk 2 (https://canvas.pointloma.edu/courses/84756/assignments/1258447) 	due by 9am
Wed Jan 28, 2026	 Quiz Wk 3 (https://canvas.pointloma.edu/courses/84756/assignments/1258448) 	due by 9am
Mon Feb 2, 2026	 Hematology (Anemia) Patient Case Study (https://canvas.pointloma.edu/courses/84756/assignments/1258436) 	due by 11:59pm
Mon Feb 2, 2026	 Oncology Patient Case Study (https://canvas.pointloma.edu/courses/84756/assignments/1258437) 	due by 11:59pm
Wed Feb 4, 2026	 Quiz Wk 4 (https://canvas.pointloma.edu/courses/84756/assignments/1258449) 	due by 9am
Mon Feb 9, 2026	 Unit I (Wk 1-4) Discussion Board (https://canvas.pointloma.edu/courses/84756/assignments/1258433) 	due by 11:59pm
Thu Feb 12, 2026	 Unit I Exam (https://canvas.pointloma.edu/courses/84756/assignments/1258454) 	due by 11am



Date	Details	Due
Wed Feb 18, 2026	 Quiz Wk 6 https://canvas.pointloma.edu/courses/84756/assignments/1258450 	due by 9am
Tue Feb 24, 2026	 ID (SSTI) Patient Case Study https://canvas.pointloma.edu/courses/84756/assignments/1258442 	due by 7pm
Wed Feb 25, 2026	 Quiz Wk 7 https://canvas.pointloma.edu/courses/84756/assignments/1258451 	due by 9am
Mon Mar 2, 2026	 ID (OIs) Patient Case Study https://canvas.pointloma.edu/courses/84756/assignments/1258441 	due by 11:59pm
Wed Mar 4, 2026	 Quiz Wk 8 https://canvas.pointloma.edu/courses/84756/assignments/1258452 	due by 9am
Mon Mar 16, 2026	 Home med list assignment Spring Break https://canvas.pointloma.edu/courses/84756/assignments/1258440 	due by 11:59pm
Wed Mar 18, 2026	 Quiz Wk 9 https://canvas.pointloma.edu/courses/84756/assignments/1258453 	due by 9am
Sun Mar 22, 2026	 Unit II Assignment Wk9 https://canvas.pointloma.edu/courses/84756/assignments/1258455 	due by 11:59pm



Date	Details	Due
Mon Mar 23, 2026	 Unit II (Wk 5-9) Discussion Board (https://canvas.pointloma.edu/courses/84756/assignments/1258434) 	due by 11:59pm
Wed Mar 25, 2026	 Unit II Exam (https://canvas.pointloma.edu/courses/84756/assignments/1258456) 	due by 9am
Wed Apr 1, 2026	 Quiz Wk 11 (https://canvas.pointloma.edu/courses/84756/assignments/1258444) 	due by 9am
Mon Apr 13, 2026	 Cardiovascular (DVT) Patient Case Study (https://canvas.pointloma.edu/courses/84756/assignments/1258438) 	due by 11:59pm
Wed Apr 15, 2026	 Quiz Wk 13 (https://canvas.pointloma.edu/courses/84756/assignments/1258445) 	due by 9am
Mon Apr 20, 2026	 Unit III Assignment Wk 13 (https://canvas.pointloma.edu/courses/84756/assignments/1258457) 	due by 11:59pm
Wed Apr 22, 2026	 Quiz Wk 14 (https://canvas.pointloma.edu/courses/84756/assignments/1258446) 	due by 9am
Mon Apr 27, 2026	 Unit III (Wk 10-14) Discussion Board (https://canvas.pointloma.edu/courses/84756/assignments/1258435) 	due by 11:59pm



Date

Details

Due

Wed Apr 29, 2026

 [Unit III Exam](#)
<https://canvas.pointloma.edu/courses/84756/assignments/1258458>

due by 11:59pm



Wed May 6, 2026

 [Cardiovascular \(IHD\) Patient Case Study](#)
<https://canvas.pointloma.edu/courses/84756/assignments/1258439>

due by 7pm

