

Online POP Course Syllabus

PHA6286 Pharmaceutical Microeconomics

3 credit hours

Note: The final syllabus posted in the course Canvas site (accessible to enrolled students) is the most current and supersedes this syllabus.

Class Meeting Times

This course meets synchronously via Zoom. The class meetings are two (2) hours in the evening (Eastern time zone) or on Sundays. Specific class dates will be announced by program administrators to students in the Online POP Graduate program prior to course enrollment.

Class Meeting Location

Class meetings are held in Zoom, which can be accessed via the course Canvas site. If you are having trouble accessing the course Canvas site, please contact Distance Education Support Services at DESS@ahc.ufl.edu.

Instructor

Mitch Higashi, PhD

Adjunct Instructional Professor

University of Florida, College of Pharmacy, Department of Pharmaceutical Outcomes and Policy

Associate Chief Science Officer

International Society of Pharmacoeconomics and Outcomes Research

Course Description

This course explores microeconomic principles driving the health care market, with an emphasis on the pharmaceutical market. Topics include rationale decision making frameworks, supply and demand curves, how incentives affect supply, and features of health insurance and prescription drug benefits. Students will explore how health care markets differ from other economic markets, reasons behind high drug prices, and strategies to address them. The course will challenge students to examine inequalities in health outcomes, contrast public and private health systems globally, and analyze the peer-reviewed literature to explain features of the pharmaceutical market.

Course Objectives

Upon successful completion of this course, the student will be able to:

1. Apply the components of rationale decision-making to describe how individuals make decisions about health and medical care.
2. Use supply and demand curves to explain features of the health care and pharmaceutical markets.

Online POP Course Syllabus

3. Explain how incentives affect the supply of health care.
4. Analyze features of health insurance.
5. Explain why the health care market is fundamentally different than other markets.
6. Recall features of health insurance and pharmacy benefit programs in the US, including who is eligible and how payments are structured.
7. Discuss reasons for and solutions to address high drug prices in the US.
8. Recognize sources of inequality in health outcomes.
9. Contrast private and public health system models across key global markets.
10. Identify and interpret evidence about prescription drugs or pharmaceutical services in the peer-reviewed literature and other reputable sources.

Relationship to Program-level Student Learning Outcomes

This course pertains to the following program-level student learning outcome:

1. Apply pharmacoeconomic theories and methods to assess the cost-effectiveness of pharmaceutical interventions and critically evaluate the implications of pharmacoeconomic studies.

Required Textbooks and/or Software

Economics of Healthcare, by Andrew Friedson. ISBN 978-1009258432.

Recommended Materials

None

Course Pre-Requisites

None

Structure and Organization

This course is organized into weekly modules in UF's e-learning system, Canvas. The readings, lectures, and assignments for each module are clearly detailed in Canvas. In addition, the faculty and students meet synchronously once per week using Zoom. This course is self-paced to accommodate the time constraints of individual students. However, students are expected to complete the assigned work for each module before each weekly synchronous class meetings and by the posted deadline.

Online POP Course Syllabus

Course Schedule

Module	Class Meeting Date & Time	Module Topic	Required Readings	Assignments (Due dates and times are TBA)	Topics
1	TBA	Introduction to pharmaceutical microeconomics	Chapters 1-3	<ul style="list-style-type: none"> Syllabus quiz Chapter 1-3 quizzes Price sensitivity research assignment In-class discussion 	Preferences Utility Accounting costs Economic costs Health production function Marginal changes Flat of the curve Law of Demand Demand curves Elasticity Demand shifters Consumer surplus
2	TBA	Health insurance: Demand and evidence	Chapters 4-5	<ul style="list-style-type: none"> Chapter 4-5 quizzes Pharmaceutical evidence assignment In-class discussion 	Premiums Copays Coinsurance Indemnity Deductibles Payment limits Association Causation Latent variables Reverse causality Central limit theorem RAND, Oregon, and IRS experiments Quasi-experiments
3	TBA	Providers	Chapters 6-8	<ul style="list-style-type: none"> Chapter 6-8 quizzes Provider labor assignment In-class discussion 	Provider production efficiency Market equilibrium Perfect competition Intensive margins Extensive margins Amenities Market concentration Monopsony Fee-for-service Induced demand

Online POP Course Syllabus

Module	Class Meeting Date & Time	Module Topic	Required Readings	Assignments (Due dates and times are TBA)	Topics
4	TBA	Hospitals and insurance	Chapters 9-11	<ul style="list-style-type: none"> Chapter 9-11 quizzes Adverse selection assignment In-class discussion 	Not-for-profit hospitals Hospital competition Risk aversion Insurance premiums Insurance profits Moral hazard Adverse selection Asymmetric information Uninsurable Single-payer system Individual mandate Pre-existing conditions
5	TBA	Payments	Chapters 12-14	<ul style="list-style-type: none"> Chapter 12-14 quizzes Public health insurance assignment In-class discussion 	Equilibrium Prices felt by patients and providers Chargemaster Allowed amount Risk adjustment MCO structures MCO tools for providers MCO tools for patients Medicare Medicaid Medicare Part D
6	TBA	Pharmaceuticals	Chapter 15 Kesselheim 2016	<ul style="list-style-type: none"> Chapter 15 quiz Module 6 quiz Pharmaceutical pricing supply and demand assignment In-class discussion 	Patents Drug approval process Market exclusivity Generics Evergreening High drug prices: sources, justifications, consequences International approaches to drug pricing
7	TBA	International comparisons	Chapter 18-19	<ul style="list-style-type: none"> Chapter 18-19 quizzes In-class discussion Comprehensive final exam 	Social determinants of health Inequality in health outcomes International comparisons of health care spending Reasons for differences in health care spending International health system models

TBA=to be announced and posted in Canvas

Online POP Course Syllabus

Evaluation Methods

Quizzes (50%):

The course includes a multiple-choice, open-book quiz over every chapter reading from the textbook. Additionally, there is a multiple-choice, open book quiz over the syllabus and one over Module 6 content (lectures and reading assignment). Students do not have to finish a quiz in one sitting (i.e., you can start and stop a quiz, and it will retain your answers).

In total, there are 19 quizzes in this course. All are worth 20 points, and each quiz is weighted equally. Quizzes are due before each synchronous class meeting. The deadlines are posted on Canvas.

Assignments (25%):

Each module in this course includes an assignment that pertains to the module objectives. Each assignment includes 4 short-answer questions.

In total, there are 7 assignments. All are worth 20 points, and each assignment is weighted equally. Assignments are due before each synchronous class meeting. The deadlines are posted on Canvas.

Final Exam (15%):

There is a comprehensive exam at the end of the course covering content from all course modules. The exam is comprised of 50 multiple choice and true/false questions. The questions are sourced from the course quizzes and the questions map to the topic list in the syllabus (see "Course Schedule" above).

In-class Discussion (10%):

Students will receive a score each week based on their contributions to the in-class discussion. There are two ways that students can earn points: (1) by responding when called upon by the instructor, (2) raising a hand and asking a question. Students who do not participate in the class discussion will not receive points for that discussion. The lowest in-class discussion grade will be dropped when calculating the course grade.

Class discussions are used to advance student understanding of complex topics in this course. The questions that will be discussed are provided to the students prior to the class meeting. Students should be prepared for the discussion and should be comfortable responding to a question with another question or expressing points of ambiguity about the topic.

Timeline for instructor feedback:

Grades and feedback from the instructor will be posted within 7 calendar days.

Online POP Course Syllabus

Attendance Policy for this Course

Students may miss any one of the class meetings with no penalty. Students will receive a zero for that in-class discussion, and the lowest in-class discussion grade will be dropped.

Absences (defined as missing 30 minutes or more of a class meeting) beyond the one allowed absence will be categorized as excused or unexcused with the following penalties:

Unexcused absences from a class carry a 5-point (1/2 letter grade) penalty taken off the final grade.

Excused absences require a make-up reflection paper on the module topic to be submitted within 2 weeks of the missed class (unless the class is near the end of the semester and a shorter timeline will be required). This paper requires you to listen to the recorded class session and write a reflection paper on the content covered during the missed class. Absences are considered excused when the student (not a peer) has emailed the instructor before the synchronous class meeting begins and conveys why the student will miss class, such as illness, job conflict, and other emergencies. Two or more excused absences will be addressed by the instructor and may result in an incomplete final grade for the course.

Attendance Policy for Online POP

Students are expected to formally [drop or withdraw](#) from the course if they no longer wish to participate. See the program's [Academic Calendar](#) for applicable deadlines. In some cases, the University may automatically drop students for inactivity and/or for failure to pay tuition. It is crucial for students to communicate with the DESS (DESS@ahc.ufl.edu) about their status in the course, and about any tuition deferments or other special conditions related to their tuition payment. Any student who remains enrolled in the course after the drop/add deadline is considered tuition-liable, unless exempted by University petition. The official UF Attendance Policy can be found [here](#).

Make-up Policy:

Each assignment is posted with a clear due date. **Assignments that are not submitted by the due date will be given a zero.** The instructor will consider extenuating circumstances on a case-by-case basis – if contacted by the student in advance of the due date. No other makeup assignments are offered. Contact the instructor for any concerns.

Online POP Course Syllabus

Grading Policy

The only passing grades for graduate students are A, A-, B+, B, B-, C+, C, and S. Grades of B-, C+ or C count toward a graduate degree if an equal number of credits in courses numbered 5000 or higher have been earned with grades of B+, A- and A, respectively. Grade points are not given for S and U grades; S and U grades are not used to calculate grade point averages. All letter-graded courses eligible to count toward the graduate degree, except 1000- and 2000-level courses, are used to calculate the cumulative grade-point average. Letter grades of C-, D+, D, D- or E are not considered passing at the graduate level, although the grade points associated with these letter grades are included in grade point average calculations. See the [UF graduate academic regulations](#) for more information.

A	>92.500%
A-	89.500–92.499%
B+	86.500–89.499%
B	82.500–86.499%
B-	79.500–82.499%
C+	76.500–79.499%
C	72.500–76.499%
C-	69.500–72.499%
D+	66.500–69.499%
D	62.500–66.499%
D-	59.500–62.499%
E	<59.499%

Artificial Intelligence Use Policy

When authorized by the instructor, students may use AI technologies in the completion of coursework if they cite all such use by naming the technology and how it was employed. Students assume full responsibility for all content, including errors and omissions. Assistive technology authorized as part of an accommodation for a disability is always permitted.

Online POP Course Syllabus

Course Technology Support

Your instructor is not able to handle technological issues or answer questions related to computer issues.

- **Assistance accessing course Canvas page:** Contact Distance Education Support Services at DESS@ahc.ufl.edu
- **IT Support:** Contact UF Computing Help Desk at 352-392-HELP (4357) or helpdesk@ufl.edu or submit an [online request form](#). If a technical problem causes you to miss an assignment, you must report the problem to the Help Desk and then email your instructor your Help Desk ticket number to the instructor in order to receive an extension.

Students Requiring Academic Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the [Disability Resource Center](#). 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 technologies meet online learning accessibility standards for sight and hearing-impaired learners. Likewise, course materials are developed in accordance with accessibility standards. Course documents and webpages are formatted for screen-reader accessibility with the use of headings, styles, or alternative text tagging for images. Accessibility design tools in Microsoft Office products and in Canvas are used to evaluate and update accessibility issues detected in the instructional materials. Synchronous class sessions in Zoom are recorded. These recordings are posted to the course site to accommodate students unable to attend.

- [Canvas Accessibility](#)
- [Zoom Accessibility](#)

Course Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. [Click here for guidance on how to give feedback in a professional and respectful manner](#). Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/.

University Honesty Policy and Academic Integrity

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

Online POP Course Syllabus

assignment.” [The Honor Code](#) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Regarding academic integrity, students in the program are strongly encouraged to be mindful of what constitutes plagiarism. Written assignments that contain the research or other original published work of someone else must be properly quoted, cited, paraphrased, or referenced appropriately. A software (TurnItIn) that is integrated with Canvas Assignments may be utilized to help students determine if a written submission meets the criteria for a properly referenced research paper. Please ask for help, utilize resource materials and take advantage of opportunities like creating a draft of your paper to test, ensuring you have addressed any errors prior to the final submission.

Please watch these short videos about this topic:

- [Understanding and Avoiding Plagiarism: Types of Plagiarism](#)
- [Avoiding Plagiarism](#)

Software Use and Course Technology

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

The University policy on use of ChatGPT is available [here](#).

Educational technology in the program is primarily the Canvas Learning Management System (LMS) and Zoom web conferencing software. These tools firmly support learning objectives and course goals. Writing with communication tools, reading articles from digital collections, and viewing video presentations in high-quality, accessible formats are essential to facilitate meaningful learning experiences. These experiences expand knowledge and influence professional work habits and skills such as information-gathering techniques and evidence-based practice. Synchronous class sessions in Zoom provide learners with opportunities to gain confidence and practice how they interact and collaborate in online meetings.

- [Canvas Student Guide](#)
- [Zoom Resources](#)

A minimum number of other technical skills are required for success in the online courses. These include accessing course webpages to read text and listen to recorded videos, using word processing tools (MS Word,

Online POP Course Syllabus

PowerPoint), downloading/uploading content, submitting online assignments and using a variety of communication tools (Canvas Inbox, Discussions, Zoom Conferences).

Course Communication

Canvas (Inbox tool) will be used as the primary communication tool between the instructor and students. Check daily for new announcements or notifications about course updates. UF email will also be used occasionally for mass communication to the class, so please check your email at least once a day as well. All emails sent out to the entire class will also be posted as an Announcement on Canvas. The instructor will generally respond to student messages within 48 hours.

General questions about course content (e.g., assignments or lectures) or policies should be posted to the course discussion board. We expect students to help each other track down answers as best as possible. Read through all the other posts in the discussion board first before posting to make sure your question has not been addressed/answered already. Please include a clear subject title for your topics to make it clear what your post pertains to. The instructor will generally respond to questions posted on the course discussion board within 48 hours.

Emotions can easily be misinterpreted on a discussion board/emails, so make sure your message is clear before sending it since there are no physical gestures or voice inflections that accompany posts/emails. Any posts/emails deemed inappropriate by the faculty will be dealt with on a case-by-case basis with either the faculty directly or they will be sent on to the Associate Dean for Professional Affairs.

For personal issues/questions, please email your instructor. Be sure to include in your subject line the course listing and then a quick subject (e.g., PHAXXXX – Your Name -). This will allow instructors to quickly identify emails related to the course amongst the many emails that are received each day. Emails not correctly addressed may get lost in the shuffle and unintentionally deleted or ignored so be sure to follow the guidelines exactly.

Student Privacy

There are federal laws protecting your privacy in terms of grades earned in courses and on individual assignments. For more information, please see the [Notification to Students of FERPA Rights](#).

Recordings of weekly class sessions in Zoom are created for the purpose of course teaching and learning, as well as for use as a resource for students who miss a class session.

The use of video (or web camera) feature in Zoom is not a requirement, but rather is voluntary for meeting participants. For both the audio and video features in Zoom, you will have the option to Start or Stop these functions.

Students who participate with their camera engaged or who utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure

Online POP Course Syllabus

to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

- [Zoom Software Privacy Statement](#)
- [Canvas \(by Instructure\) Privacy Policies](#)

Security

Online activity in Canvas requires an active UF GatorLink account to log in, as well as enrollment in courses. The Zoom Conference meetings for weekly classes are accessed within Canvas. These meetings have a pass code applied as an additional security setting. Students in the class do not need to enter the passcode, however anyone not enrolled in the course cannot join the meeting without it.

Library Resources

For remote access to UF library resources such as e-journals or other digital collections, use the [UF VPN or proxy server to connect](#).

Additional University Resources

- **U Matter, We Care:** If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.
- [Counseling and Wellness Center](#)
- **Sexual Assault Recovery Services (SARS):** Student Health Care Center, 392-1161.
- **University Police Department** at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu
- **E-learning technical support:** 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.
- **Teaching Center:** Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.
- **Writing Studio:** 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.
- [Student Complaints](#)