



BPSI 407: Pharmaceutical and Health Economics

Instructor: Erin Trish, PhD
Associate Professor, Department of Pharmaceutical and Health Economics
USC School of Pharmacy
Co-director, USC Schaeffer Center for Health Policy & Economics
etrish@usc.edu
Office: VPD 412D

Scheduling Contact:
Duy-An Le
duyanle@usc.edu

Office Hours: By appointment

Course Weight: 4 units (two 1.5 hour sessions; plus 1 hour outside activities)

Day/Time/Location: Tuesdays and Thursdays 9:30-10:50am; WPH 205

Course Description: *Application of economic principles to pharmaceutical and health care issues; prescription drug pricing, access, and innovation; topics related to pharmaceutical policy*

This course introduces the student to the field of pharmaceutical and health economics. It focuses on the institutions, processes, and incentives that govern health care delivery. While the course emphasizes pharmaceuticals – including their innovation, consumption, and contribution to the production of health – it also places them in the context of the incentives and dynamics at play in the broader health care delivery system. Moreover, the course is designed to provide students with the tools to critically evaluate health, health care, and pharmaceutical policies. Specifically, the goal is to strengthen students' ability to recognize, describe, and use economic, statistical, and mathematical tools in evaluating pharmaceutical and health policies.

Learning Objectives:

This course is designed for undergraduates of both scientific and non-scientific majors with an interest in learning about economic principles and concepts underlying the pharmaceutical and health care industries. Readings will include journal articles and other timely materials such as policy white papers and newspaper articles. Students will critically evaluate and debate policy positions and emerging topics will be discussed.

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

- Demonstrate working knowledge of the structure of the pharmaceutical industry and its context in the health care industry, including the key business and policy issues that affect each and the way they interact;
- Engage in a debate about pharmaceutical policy, including demonstrating knowledge of the long- and short-term tradeoffs related to access and innovation;
- Apply economic and statistical reasoning to the pharmaceutical and health care industries.

Course Notes:

This course will be Letter grading. Lecture topics will be posted to Brightspace throughout the semester. Readings will be posted at least one week in advance of the lecture. Lecture notes will be available by the start of each session.

Description and Assessment of Assignments:

Evaluation will be based on a midterm examination, a final examination, in-class quizzes, in-class presentations, participation in in-class exercises and debates, and a written policy memo with the following breakdown:

In-class quizzes (15%): There will be four or five in-class quizzes throughout the semester. Quizzes will be about 15 minutes in length and will consist of short-response questions designed to test your knowledge of course material and readings. Quiz dates will be announced one week in advance. Missed quizzes cannot be made up. However, the lowest quiz score of the semester will be dropped.

Presentations and in-class exercise participation (20%): Central to the field of pharmaceutical and health economics is understanding and evaluating tradeoffs and being able to articulate and explain these to others. Every position on the key points in this field has certain strengths and weaknesses. In-class presentations will occur in the second half of the semester comparing issues in US pharmaceutical economics and policy to those in other countries. Students will be graded on the basis of how well they identify the strengths and weaknesses of various policy approaches observed in different settings in terms of different goals and outcomes. Additionally, throughout the entire semester, lectures will include in-class exercises and debates designed to exemplify the economic issues under discussion. Active participation in these exercises and subsequent discussion is an important part of the learning experience and is expected.

Policy memo (20%): Effectively and concisely communicating a policy recommendation—in writing—is an important skill. This assignment will require students to apply the economic tools learned in this class to articulate the issues and tradeoffs related to a timely issue in pharmaceutical or health policy. Students will write a concise policy memorandum including a

problem statement, policy proposal, and evaluation of the strengths and weaknesses of that policy proposal to address the problem, concluding with a policy recommendation.

Midterm (20%) and final (25%) exams: Exams will be a combination of true/false, short-response, and problem-solving questions. There will be one midterm and one final exam. The final exam will be cumulative.

Grading Breakdown:

Quizzes	15% of grade	30 points
Presentations and in-class exercise participation	20% of grade	40 points
Policy memo	20% of grade	40 points
Midterm exam	20% of grade	40 points
<u>Final exam</u>	<u>25% of grade</u>	<u>50 points</u>
Total	100% of grade	200 points

Key Dates:

- **Tuesday, October 8** – Midterm exam (in class)
- **Thursday, November 14** – Topic selection for policy memo due
- **Thursday, December 5** – Policy memo due
- **Thursday, December 12** – Final exam (11am – 1pm)

- **Thursday, October 10** – No class (Fall recess)
- **Thursday, November 28** – No class (Thanksgiving break)

Grading Scale:

Course final grades will be determined using the following scale:

Letter grade	Corresponding numerical point range
A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	59 and below

Grading Timeline:

Students can expect grading and feedback within one week of assignments.

Academic Integrity

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the [USC Student Handbook](#). All students are expected to submit assignments that are original work and prepared specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

Academic dishonesty has a far-reaching impact and is considered a serious offense against the university. Violations will result in a grade penalty, such as a failing grade on the assignment or in the course, and disciplinary action from the university itself, such as suspension or even expulsion.

For more information about academic integrity see the [student handbook](#) or the [Office of Academic Integrity's website](#), and university policies on [Research and Scholarship Misconduct](#).

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment or what information requires citation and/or attribution.

Course Content Distribution and Synchronous Session Recordings Policies

USC has policies that prohibit recording and distribution of any synchronous and asynchronous course content outside of the learning environment.

Recording a university class without the express permission of the instructor and announcement to the class, or unless conducted pursuant to an Office of Student Accessibility Services (OSAS) accommodation. Recording can inhibit free discussion in the future, and thus infringe on the academic freedom of other students as well as the instructor. ([Living our Unifying Values: The USC Student Handbook](#), page 13).

Distribution or use of notes, recordings, exams, or other intellectual property, based on university classes or lectures is prohibited without the express permission of the instructor for purposes other than individual or group study. This includes but is not limited to providing materials for distribution by services publishing course materials. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relation to the class, whether obtained in class, via email, on the internet, or via any other media. Distributing course material without the instructor's permission will be presumed to be an intentional act to facilitate or enable academic dishonesty and is strictly prohibited. ([Living our Unifying Values: The USC Student Handbook](#), page 13).

Course Evaluations

Course evaluation occurs at the end of the semester university-wide. It is an important review of students' experience in the class. Class time will be provided for students to complete course evaluations.

Statement on University Academic and Support Systems

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. [The Office of Student Accessibility Services](#) (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Student Financial Aid and Satisfactory Academic Progress:

To be eligible for certain kinds of financial aid, students are required to maintain Satisfactory Academic Progress (SAP) toward their degree objectives. Visit the [Financial Aid Office webpage](#) for [undergraduate](#)- and [graduate-level](#) SAP eligibility requirements and the appeals process.

Support Systems:

[Counseling and Mental Health](#) - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[988 Suicide and Crisis Lifeline](#) - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline consists of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[Relationship and Sexual Violence Prevention Services \(RSVP\)](#) - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[Office for Equity, Equal Opportunity, and Title IX \(EEO-TIX\)](#) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[Reporting Incidents of Bias or Harassment](#) - (213) 740-2500

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[The Office of Student Accessibility Services \(OSAS\)](#) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[USC Campus Support and Intervention](#) - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[Diversity, Equity and Inclusion](#) - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[USC Emergency](#) - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[USC Department of Public Safety](#) - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call

Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.