#### PHA 6283: INTRODUCTION TO PHARMACOECONOMICS

3 credit hours

**Note:** The final syllabus posted in the course Canvas site is the most current and supersedes the syllabus posted on the internet.

### **Class Meeting Times**

Sundays, 8:00-10:00 pm Eastern

\*There is no class meeting on March 31 (Easter weekend)

### **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 <a href="mailto:DESS@ahc.ufl.edu">DESS@ahc.ufl.edu</a>.

#### Instructor

Karen Rascati, RPh, PhD

krascati@ufl.edu

Phone/Text: 512-471-1637

Office Hours: By appointment, before, or after class meetings

Office Location: via Zoom or phone

### **Course Description**

The purpose of this course is to introduce students to the fundamental methods of pharmacoeconomic analysis. The class will focus on the theory, methods, and application of technology assessment in health care. Applications will be drawn from a variety of health care settings, including pharmaceuticals.

#### **Course Objectives**

- 1. Understand the rationale and importance of pharmacoeconomic (PE) analyses.
- 2. Define the differences between cost-benefit analysis (CBA), cost-effectiveness analysis (CEA), cost-minimization analysis (CMA), and cost-utility analysis (CUA).
- 3. Identify and determine relevant costs and their estimation.
- 4. Critique current PE literature
- 5. Give examples of measurement of health outcomes for CMA, CEA, CUA, and CBA
- 6. Apply decision analysis methodology.
- 7. Interpret results from advanced modeling studies such as Markov analyses



- 8. Discuss issues related to Real-World Evidence (RWE) and Real-World Data (RWD)
- 9. Compare and contrast PE analyses and Budget Impact Analysis (BIA)
- 10. Describe the application of PE to various pharmacy settings
- 11. Compare PE analyses and policies between countries
- 12. Discuss current US PE issues

#### **Relationship to Program-level Student Learning Outcomes**

This course pertains to the following program outcomes:

- 1. Apply pharmacoeconomic theories and methods to assess the cost-effectiveness of pharmaceutical interventions and critically evaluate the implications of pharmacoeconomic studies.
- 2. Propose and assess the financial and clinical implications of managed care pharmacy practices.

#### **Required Textbook**

Essentials of Pharmacoeconomics, 3rd Edition (2021), by Karen Rascati ISBN-13: 978-1975139445; ISBN-10: 1975139445

#### **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 assigned work (eg, readings, videos, discussion boards, and assignments) for each module is clearly detailed in Canvas. In addition, the faculty and students meet synchronously once per week using Zoom.

## **Course Schedule**

Week	Date	Due Dates	Topic/ Activities	Chapter(s)
1	March 10		Introduction	Ch. 1
			Costs	Ch. 2
2	March 17		Assessing Articles	Ch. 3
	Watch 17		Cost-Minimization Analysis	Ch. 4
3	March 24	HW1 – Due April 5	Cost-Effectiveness Analysis	Ch. 5
			Cost-Utility Analysis	Ch. 6
			Cost-Benefit Analysis	Ch. 7
	March 31	EASTER – NO CLASS		
		HW2 -Due April 12	Health-related Quality-of-Life	Ch. 8
4	April 7		Decision Analysis	Ch. 9
			Markov Analysis	Ch. 10
5	April 14	HW 3 – Due April 19	Real-World Data	Ch. 11- 12
			Budget Impact Analysis	
		HW 4 – Due April 25	Pharmacy Services	
6	April 21		International Perspective	Ch 13-15
			Future	
7	April 28		Student Presentations	

## **Evaluation Methods**

HW1	Critique 1 = 50 points	20% of grade
HW2	Critique 2 = 50 points	20% of grade
HW3	Critique 3 = 50 points	20% of grade
HW4	Final Critique (Compare/contrast) = 75 points	30% of grade
	Final Critique presentation = 25 points	10% of grade

#### **Timeline for instructor feedback:**

Grades and feedback from the instructor will be posted within 3 calendar days.



## **Diversity, Equity, and Inclusion**

"An inclusive classroom climate refers to an environment where all students feel supported intellectually and academically and are extended a sense of belonging in the classroom regardless of identity, learning preferences, or education." -Yale Center for Teaching and Learning

The online Pharmaceutical Outcomes and Policy (POP) graduate program embraces the idea that we all benefit from our individual differences and that our collected diversity is a source of strength. Additionally, as members of the health care community, improving health equity for our patients or others whom we serve, begins with us.

Our instructors are committed to creating course environments that celebrate diversity, honor inclusivity, and ensure equity for all students. It is important that all class-related interactions feel like a safe space for students of all backgrounds and learning styles to feel welcome, heard, and supported.

And, as this is your learning experience, your suggestions to ensure this commitment is fulfilled are encouraged and appreciated. Interactions that do not honor the spirit of this commitment will be addressed as they arise on an as needed basis.

## **Attendance Policy for this Course**

Students are expected to attend the synchronous class meetings. Students who miss 30 minutes or more of the synchronous class meeting are considered absent.

**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). 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 <u>drop or withdraw</u> from the course if they no longer wish to participate. See the program's <u>Academic Calendar</u> 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 <a href="https://example.com/here/">here</a>.

#### Make-up Policy:

Assignments that are not submitted by the due date will have **10% of the grade deducted for each** day that it is late. The instructor will consider extenuating circumstances on a case-by-case basis – if she is contacted by the student in advance of the due date

## **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 <u>UF graduate academic regulations</u> 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%

## **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 <a href="helpdesk@ufl.edu">helpdesk@ufl.edu</a> or submit an <a href="mailto:online request form.">online request form.</a> 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 <u>Disability Resource Center</u>. 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. <u>Click here for guidance on how to give feedback in a professional and respectful manner</u>. 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 <u>ufl.bluera.com/ufl/</u>.

### **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



assignment." <u>The Honor Code</u> 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,



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 <u>Notification to Students of FERPA Rights</u>.

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



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 <u>UF VPN or proxy</u> server to connect.

#### **Additional University Resources**

- **U Matter, We Care:** If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> 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
- <u>E-learning technical support</u>: 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.
- <u>Teaching Center</u>: 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