

The purpose of this course is to introduce students to the fundamental methods of pharmacoeconomic analysis. Topics include the terminology used in pharmacoeconomics, research methods frequently used in pharmacoeconomics, and the role of pharmacoeconomics in the drug development process and health care decision making relevant to the practice of pharmacy. These principles will prepare the student for future coursework where the student will develop and implement individualized treatment plans, taking into consideration pharmacoeconomic factors.

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

Course Corequisites: N/A

Course Faculty and Staff	
Course Director	Instructional Designer
Hasesuk Park, Ph.D. 352-273-6261 hpark@cop.ufl.edu Malachowsky Hall 6020	Skylar Johnson, M.A. sky@cop.ufl.edu
Academic Coordinators	
Morgan Milner (GNV) Morgan.milner@ufl.edu	Jessica Linares (ORL) Email: Jnoriegalinares@ufl.edu
Jaime Welsh (JAX) Email: jaimewelsh@ufl.edu	Nadja Rivera (ORL) Email: nl.riverarivera@ufl.edu

[Faculty and Staff: Who to Contact and Questions to Ask](#)

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

Course Objectives and Educational Outcomes	
Course Objectives	Linked Educational Outcome
1. Describe fundamental concepts behind rationing and economic evaluation of health care.	Learner
2. Explain the role of pharmacoeconomics in the drug development process and health care decision making.	Learner
3. Identify the role of perspective in the selection of study parameters and their impact on study design, costs, and the interpretation of results.	Steward
4. Define and describe cost-minimization analysis, cost-effectiveness analysis, cost-utility analysis, and cost-benefit analysis.	Learner
5. Outline strengths and weaknesses of standard pharmacoeconomic approaches to assess the economic impact of pharmaceutical interventions, including cost-minimization analysis, cost-effectiveness analysis, cost-utility analysis, and cost-benefit analysis.	Steward
6. Explain decision making tools such as cost-effectiveness and cost-benefit analysis and discuss their application to resource allocation, how these tools are used in practice, and what factors limit their use or interpretation.	Problem-solver
7. Summarize applications of economic, clinical, and humanistic outcomes to improve allocation of limited health care resources and interpret pharmacoeconomic studies.	Steward
8. Apply knowledge of pharmacoeconomic approaches for performing a decision analysis	Problem-solver

Course Objectives and Educational Outcomes

9. Describe the importance of measuring health-related quality of life.	Steward
10. Define the methods for assessing the psychometric properties of health-related quality of life instruments, such as reliability, validity and responsiveness.	Learner
11. Critique the results of articles that use the following analyses that measure and estimate costs: a) Cost-minimization analysis b) Cost-effectiveness analysis c) Cost-utility analysis d) Cost-benefit analysis e) Decision analysis	Problem-solver

Course Resources and Fees

Course Outline
See Appendix A. Please routinely check your Google 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
Required article readings are available in Canvas (please refer to course outline in Appendix A for article names). 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 at this URL: http://www.library.health.ufl.edu/
Suggested Textbooks/Readings
Suggested readings are available in Canvas.
Other Required Learning Resources
None
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 [2 @ 5% each]	10%
tRAT [2 @ 5% each]	10%
Article Review Activity in ALS 1	10%
Problem Solving Activity in ALS 2	10%
Final Exam	60%
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.

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

Article Review Activity (10%)

During the 1st Active Learning Session on Modules 1-4, students will be given two pharmacoeconomic articles and participate in critiquing the articles and problem-solving process in groups. The class will then be facilitated by a class-wide discussion to gain deeper knowledge.

Problem-Solving Activity (10%)

During the 2nd Active Learning Session on Modules 5-7, students will be given a list of problems from a case study and participate in the problem-solving process in groups. The class will then be facilitated by a class-wide discussion to gain deeper knowledge.

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 2 required sessions (Active Learning). A student who misses greater than 1 session 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

Makeup assignments may be required for excused absences from all Active Learning Sessions. Students will be required to complete the makeup assignment within one week of the missed session.

Late Assignments

No late assignments will be accepted.

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](#) at this URL: <http://curriculum.pharmacy.ufl.edu/current-students/technical-help/>

Artificial Intelligence (AI) Use for Assessments

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)	Objectives	Responsible
	1	Module	Module 1: Pharmacoeconomics Overview		1-3	Haesuk Park
09/26/25	1	Lecture Video	Watch: Introduction to Pharmacoeconomics	37	1-3	Haesuk Park
	1	Optional/Supplemental	Read: Rascati Karen L. Essentials of Pharmacoeconomics, Second Edition, Lippincott Williams & Wilkins, 2014; Chapter 1		1-3	Haesuk Park
	2	Module	Module 2: Measuring and Estimating Cost and Critiquing Research Article		3-5	Haesuk Park
09/26/25	2.1	Lecture Video	Watch: Measuring and Estimating Costs	52	3-5	Haesuk Park
09/26/25	2.2	Lecture Video	Watch: Critiquing Research Articles	30	3-5	Haesuk Park
	2	Optional/Supplemental	Read: Rascati Karen L. Essentials of Pharmacoeconomics, Second Edition, Lippincott Williams & Wilkins, 2014; Chapters 2 and 3		3-5	Haesuk Park
	3	Module	Module 3: Cost-Minimization Analysis and Cost-Effectiveness Analysis		3-5,11	Haesuk Park
09/26/25	3.1	Lecture Video	Watch: Cost-Minimization Analysis	8	3-5,11	Haesuk Park
09/26/25	3.2	Lecture Video	Watch: Cost-Effectiveness Analysis	68	3-5,11	Haesuk Park
09/26/25	3	Reading	Read: (Pre-ALS) Cost-effectiveness analysis of adding pharmacists to primary care teams to reduce cardiovascular risk in patients with Type 2 diabetes: results from a randomized controlled trial	25	3-5,11	Haesuk Park
	3	Optional/Supplemental	Read: Rascati Karen L. Essentials of Pharmacoeconomics, Second Edition, Lippincott Williams & Wilkins, 2014; Chapters 4 and 5		3-5,11	Haesuk Park
	3	Optional/Supplemental	Read: Luce et al. "Methods of Cost-effectiveness analysis: Areas of consensus and debate." Clinical Therapeutics 1995. (UF Libraries)		3-5,11	Haesuk Park
	3	Optional/Supplemental	Read: Law et al. "Cost-effectiveness analyses of the conversion of patients with non-insulin-dependent diabetes mellitus from glipizide to glyburide and of the accompanying pharmacy follow-up clinic." Clinical Therapeutics 1995. (UF Libraries)		3-5,11	Haesuk Park

Date / Time [Recommended for Independent Study]	Mod#	Activity	Activity Title	Contact Time (min)	Objectives	Responsible
	3	Optional/Supplemental	Read: Recommendations for Conduct, Methodological Practices, and Reporting of Cost-effectiveness Analyses: Second Panel on Cost-Effectiveness in Health and Medicine		3-5,11	Haesuk Park
	4	Module	Module 4: Cost-Utility Analysis		3-6, 11	Haesuk Park
09/29/25	4.1	Lecture Video	Watch: Cost Utility Analysis Part 1	51	3-6, 11	Haesuk Park
09/29/25	4.2	Lecture Video	Watch: Cost Utility Analysis Part 2	24	3-6, 11	Haesuk Park
09/29/25	4	Reading	Read: (Pre-ALS) The Costs and Cost-effectiveness of Collaborative Care for Adolescents With Depression in Primary Care Settings: A Randomized Clinical Trial. - PubMed - NCBI	25	3-6, 11	Haesuk Park
	4	Optional/Supplemental	Read: Athan et al. "Cost-effectiveness of routine and low-cost CD4 T-cell count compared with WHO clinical staging of HIV to guide initiation of antiretroviral therapy in resource-limited settings." AIDS 2010. (UF Libraries)		3-6, 11	Haesuk Park
	4	Optional/Supplemental	Read: Rascati Karen L. Essentials of Pharmacoeconomics, Second Edition, Lippincott Williams & Wilkins, 2014; Chapter 6		3-6, 11	Haesuk Park
	5	Module	Module 5: Cost-Benefit Analysis		3-6, 11	Haesuk Park
09/29/25	5.1	Lecture Video	Watch: Cost Benefit Analysis Part 1	43	3-6, 11	Haesuk Park
09/29/25	5.2	Lecture Video	Watch: Cost Benefit Analysis Part 2	38	3-6, 11	Haesuk Park
09/29/25	5	Reading	Read: Rascati Karen L. Essentials of Pharmacoeconomics, Second Edition, Lippincott Williams & Wilkins, 2014; Chapter 7	80	3-6, 11	Haesuk Park
10/1/25 from 10am-11:50am	1-4	Active Learning Session	Active Learning Session 1 (2 hours)	110	3-7, 9-11	Haesuk Park
10/01/25	1-4	Quiz (iRAT/tRAT)	iRAT/tRAT 1		3-7, 9-11	Haesuk Park
Due In Class	1-4	Assignment (Graded)	Article Review Activity			
	6	Module	Module 6: Health-Related Quality of Life		3-7, 9-11	Haesuk Park
09/30/25	6.1	Lecture Video	Watch: Health-Related Quality of Life Part 1	28	3-7, 9-11	Haesuk Park
09/30/25	6.2	Lecture Video	Watch: Health-Related Quality of	31	3-7, 9-11	Haesuk Park

Date / Time [Recommended for Independent Study]	Mod#	Activity	Activity Title	Contact Time (min)	Objectives	Responsible
			Life Part 2			
	6	Optional/Supplemental	Read: Rascati Karen L. Essentials of Pharmacoeconomics, Second Edition, Lippincott Williams & Wilkins, 2014; Chapter 8		3-7, 9-11	Haesuk Park
	7	Module	Module 7: Decision Analysis		3-7, 9-11	Haesuk Park
09/30/25	7.1	Lecture Video	Watch: Decision Analysis	52	3-7, 9-11	Haesuk Park
	7	Optional/Supplemental	Read: Rascati Karen L. Essentials of Pharmacoeconomics, Second Edition, Lippincott Williams & Wilkins, 2014; Chapter 9		3-7, 9-11	Haesuk Park
	7	Optional/Supplemental	Read: Jackson et al. "An employer-based cost-benefit analysis of a novel pharmacotherapy agent for smoking cessation." Journal of Occupational and Environmental Medicine 2007		3-7, 9-11	Haesuk Park
10/2/25 from 8am-9:50am	1-7	Active Learning Session	Active Learning Session 2 (2 hours)	110	3-7, 9-11	Haesuk Park
10/02/25	1-7	Quiz (iRAT/tRAT)	iRAT/tRAT 2		3-7, 9-11	Haesuk Park
Due In Class	1-7	Assignment (Graded)	Problem-Solving Activity		3-7, 9-11	Haesuk Park
10/2/25 from 9:50am-10:15am		Course Evaluation	Pharmacoeconomics Course Evaluation			
10/3/25 from 9am-11am	1-7	Exam	Final Exam (2 hours)		1-11	Haesuk Park
	1-7	Exam Review	Final Exam Review: Pharmacoeconomics			
			Total Hours	16.24		