



**Health Services  
Administration**

**University of Wyoming PHCY  
5141  
Introduction to Health  
Economics and Outcomes  
Spring 2021  
March 7 to April 25**

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**PHCY 5141**  
**Introduction to Health Economics and Outcomes**  
**Spring 2021**

Introduction to Health Economics and Outcomes is a 3-semester hour course designed to provide a theoretical foundation and basic methods of application in health technology assessment. This course considers the role of the range of outcomes used by clinicians and health care systems in assessing treatment modalities. The framework for conducting and assessing outcomes research will be emphasized. There is significant interest in health outcomes, such as long term clinical outcomes. In addition, much attention is now focused on health care costs that has become crucial for hospitals, managed care organizations, as well as state and federal governments. In addition, there is growing interest in patient reported outcomes.

**STUDENT LEARNING OUTCOMES AND GOALS:**

At the end of the course, students will be able to:

- Understand the economic constructs of health and illness
- Identify various types of health care costs and sources
- Identify an appropriate economic analysis for a given situation
- Differentiate between the types of economic analyses
- Describe the advantages and disadvantages of each type of economic analysis
- Identify an appropriate cost calculation for a specific economic analysis
- Select appropriate components for a specific type of economic analysis
- Evaluate reports of economic analyses
- Describe the role of patient reported outcomes

**REQUIRED TEXTS:**

- Required Textbook:
  - Rascati K. Essentials of Pharmacoeconomics. Third edition. (Wolters Kluwer) (2021).
- Journal Articles

**INSTRUCTOR AVAILABILITY/ CONTACT INFORMATION:**

Edward P. Armstrong, Pharm.D.

Office Hours: by appointment

Dr. Armstrong (earmstr6@uwyo.edu) will be available via electronic mail

Responses to emails will occur within 48 hours.

**CLASS WEBSITE:**

The WyoCourses site is accessible from the University website via WyoWeb. Class lectures and slide sets will be posted or linked on this site. Assignments will also be posted there (both by the instructor and submitted by the student). The student is expected to utilize the site and accept changes from this syllabus as amended on the site. You will not be able to see the course materials until after May 15<sup>th</sup>.

**LIVE SESSIONS:**

Live class sessions will be held each **Sunday from 5-8pm MT (Wyoming time)**. They will generally last about 3 academic hours (i.e., 150 minutes) with a break.

We will use Zoom for these live sessions.

Join Zoom Meeting

<https://uwyo.zoom.us/j/4270332960>

Classes will then be held weekly, with literature critiques, mid-term examination and final examination as listed on the course schedule.

**COURSE PREREQUISITES, CO-REQUISITES, ENROLLMENT RESTRICTIONS:**

This course is required for students in the Master of Science in Health Services Administration Health Institution Health Economics and Outcomes track. Other track students may take the course as an elective. Enrollment in or completion of a degree in the health sciences administration program is strongly recommended.

**COURSE PROCEDURES:**

All students will join the class at the same time (synchronous). Some activities, such as viewing recorded lectures can be done at the student's selected times (asynchronous). Opening and closing times for the modules, quizzes, or other activities will be posted and enforced.

A class session/assignment is the time that includes the live session, the pre-session work, and any immediate post-session work. For this class, a session/assignment will become available as noted in the Syllabus with due dates listed for each item.

Instructional procedures consist of pre-recorded lecture, discussion, participation exercises plus assigned readings and projects. The distance education model of this course requires some adaptation by the students and instructor from the traditional classroom setting. **You may be recorded with your face and name.** This recording will be placed on a password protected site, but no guarantees are made on its security.

Different people have different learning styles. Lecture where the instructor talks and students listen is passive on the part of the student. Discussion requires active participation on the part of the learner. In this class, some topics are appropriate for lectures; some are appropriate for discussion; and some will be conducted through active participation such as analysis of case studies and or discussion boards.

**GENERAL REQUIREMENTS AND EXPECTATIONS:**

Students should obtain the required textbook and complete assigned readings prior to the live online date listed in the course calendar. Students are encouraged to participate in live class sessions; active participation will also count towards your discussion board grade (see last page of syllabus for Guideline for Evaluating Participation).

In order for a discussion or dialogue to be successful, students must have read the assigned readings, watched any video recording and have completed some assignments **before** joining class. Assignments will be clearly indicated whether due before or after the live session.

Whether a lecture or discussion, students should feel free to ask questions during class or online. If you have a question, other students may have the same question.

### **RE-GRADING POLICY:**

Requests for a re-grade of an examination, quiz, assignment, or in-class preparedness/participation points, must be requested within 2 business days of the return of the examination, quiz, or assignment. If the 2 business day period elapses and the student does not realize this, the request for a re-grade will NOT be considered. All requests for re-grading must be made in a written statement to the course coordinator and must be supported by appropriate justification (required textbooks, reading assignments, lecture citations). A request for re-grading is a re-evaluation of your work and has the potential to increase or decrease your grade when your work is reconsidered.

### **MAKE-UP QUIZ/EXAM POLICY:**

Students who are not excused from a missed quiz or exam will receive a grade of zero on that missed assessment. Any student who misses quizzes and/or exams of a sufficient number that indicate the student has not completed enough coursework to achieve the objectives of the course will be given an incomplete (I) grade for the course.

### **POLICY ON OLD QUIZZES AND ASSIGNMENTS:**

BE ADVISED THAT the exams are an official University document, and not a public record, and therefore may not be communicated, copied or reproduced by any means, either in whole or in part, or shared with others in any form. Violators will be subject to discipline.

### **ATTENDANCE AND ABSENCE POLICIES:**

Students should regularly attend online classes and productively participate in class. Since some of the projects may be started in the live sessions, missing class can make projects much more difficult. Because of the multiple available times for posting assignments as well as for taking any quizzes or examinations, the need for an excused absence would be a rare event. Only rationale accepted by the University of Wyoming as an excused absence will be accepted. Any anticipated absence from the live sessions should be discussed in advance with the instructor.

### **CLASSROOM BEHAVIOR POLICY:**

At all times, treat your presence in the classroom and your enrollment in this course as you would any professional activity. Act professionally, arrive on time, pay attention, complete your work in a timely and professional manner, and treat all deadlines seriously. All of us will be respectful of each other. Spirited debate and disagreement are to be expected in any graduate level course and all views will be heard fully, but at all times we will behave civilly and with respect towards one another. Personal attacks, offensive language, name-calling, and dismissive gestures are not warranted in a learning atmosphere. This is a safe environment and as the instructor, I have the right to dismiss anyone from the classroom, study sessions, electronic forums, and other areas where disruptive behavior occurs – there is zero tolerance on this issue.

## **CLASSROOM STATEMENT ON DIVERSITY:**

The University of Wyoming values an educational environment that is diverse, equitable, and inclusive. The diversity that students and faculty bring to class, including age, country of origin, culture, disability, economic class, ethnicity, gender identity, immigration status, linguistic, political affiliation, race, religion, sexual orientation, veteran status, worldview, and other social and cultural diversity is valued, respected, and considered a resource for learning. Diversity helps all of us gain a better understanding and perspective of the subjects we will be covering in the course.

## **DISABILITY SUPPORT:**

The University of Wyoming is committed to providing equitable access to learning opportunities for all students. If you have a disability, including but not limited to physical, learning, sensory or psychological disabilities, and would like to request accommodations in this course due to your disability, please register with and provide documentation of your disability as soon as possible to Disability Support Services (DSS), Room 128 Knight Hall. You may also contact DSS at (307) 766-3073 or [udss@uwyo.edu](mailto:udss@uwyo.edu). It is in the student's best interest to request accommodations within the first week of classes, understanding that accommodations are not retroactive. Visit the DSS website for more information at: [www.uwyo.edu/udss](http://www.uwyo.edu/udss)

## **ACADEMIC DISHONESTY POLICIES:**

### ***Academic dishonesty, discrimination, and harassment will not be tolerated in this class!***

Cases of academic dishonesty will be treated in accordance with UW Regulation 2-114. The penalties for academic dishonesty can include, at my discretion, an "F" on an exam, an "F" on the class component exercise, and/or an "F" in the entire course. Academic dishonesty includes plagiarism, which means anything that represents someone else's ideas as your own without attribution. It is intellectual theft – stealing - and includes (but is not limited to) unapproved assistance on examinations, plagiarism (use of any amount of another person's writings, blog posts, publications, and other materials without attributing that material to that person with citations), or fabrication of referenced information. Facilitation of another person's academic dishonesty is also considered academic dishonesty and will be treated identically.

Such conduct is described within and will result in sanctions pursuant to the following School of Pharmacy and University policy and regulations:

University of Wyoming Code of Conduct

<http://www.uwyo.edu/dos/conduct/> University

of Wyoming Regulations

[http://www.uwyo.edu/generalcounsel/\\_files/docs/UW%20Reg%20Updates%202016/UW%20Reg%206-802.pdf](http://www.uwyo.edu/generalcounsel/_files/docs/UW%20Reg%20Updates%202016/UW%20Reg%206-802.pdf)

## **DUTY TO REPORT:**

While this is a safe environment and I want you all to feel comfortable coming to me with issues you may be struggling with or concerns you may be having, please be aware that I have some reporting obligations that are part of my faculty requirements at UW.

For example, if you inform me of an issue of sexual harassment, sexual assault, or discrimination

I will keep the information as private as I can, but I am required to bring it to the attention of the institution's Title IX Coordinator. If you would like to talk to those offices directly, you can contact Equal Opportunity Report and Response (Bureau of Mines Room 319, 766-5200, [report-it@uwyo.edu](mailto:report-it@uwyo.edu), [www.uwyo.edu/reportit](http://www.uwyo.edu/reportit)). Additionally, you can also report incidents or complaints to the UW Police Department. You can also get support at the STOP Violence program ([stopviolence@uwyo.edu](mailto:stopviolence@uwyo.edu), [www.uwyo.edu/stop](http://www.uwyo.edu/stop), 766-3296) (or SAFE Project ([www.safeproject.org](http://www.safeproject.org), [campus@safeproject.org](mailto:campus@safeproject.org), 766-3434, 24-Hour hotline: 745-3556).

Another common example is if you are struggling with an issue that may be traumatic or unusual stress. I will likely inform the Dean of Students Office or Counseling Center. If you would like to reach out directly to them for assistance, you can contact them using the info below or going to [www.uwyo.edu/dos/uwyocares](http://www.uwyo.edu/dos/uwyocares).

Finally, know that if, for some reason, our interaction involves a disruptive behavior or potential violation of policy, I must inform the Dean of Students, even when you and I may have reached an informal resolution to the incident. The purpose of this is to keep the Dean apprised of any behaviors (by students or faculty) and what was done to resolve them.

#### **SUBSTANTIVE CHANGES TO THE SYLLABUS:**

All deadlines, requirements, and course structure are subject to change if deemed necessary by the instructor. Students will be notified verbally in class or on our WyoCourses announcement page and/or via email of these changes.

#### **STUDENT RESOURCES:**

- DISABILITY SUPPORT SERVICES: [udss@uwyo.edu](mailto:udss@uwyo.edu), 766-3073, 128 Knight Hall, [www.uwyo.edu/udss](http://www.uwyo.edu/udss)
- COUNSELING CENTER: [uccstaff@uwyo.edu](mailto:uccstaff@uwyo.edu), 766-2187, 766-8989, 341 Knight Hall, [www.uwyo.edu/ucc](http://www.uwyo.edu/ucc)
- ACADEMIC AFFAIRS: 766-4286, 312 Old Main, [www.uwyo.edu/acadaffairs](http://www.uwyo.edu/acadaffairs)
- DEAN OF STUDENTS OFFICE: [dos@uwyo.edu](mailto:dos@uwyo.edu), 766-3296, 128 Knight Hall, [www.uwyo.edu/dos](http://www.uwyo.edu/dos) UW
- POLICE DEPARTMENT: [uwpd@uwyo.edu](mailto:uwpd@uwyo.edu), 766-5179, 1426 E Flint St, [www.uwyo.edu/uwpd](http://www.uwyo.edu/uwpd)
- STUDENT CODE OF CONDUCT WEBSITE: [www.uwyo.edu/dos/conduct](http://www.uwyo.edu/dos/conduct)

"If you have a physical, learning, sensory or psychological disability and require accommodations, please let me know as soon as possible. You will need to register with, and possibly provide documentation of your disability to Disability Support Services (DSS), room 109 Knight Hall. You may also contact DSS at (307) 766-3073 or [udss@uwyo.edu](mailto:udss@uwyo.edu). Visit their website for more information: [www.uwyo.edu/udss](http://www.uwyo.edu/udss)."

#### **COVID-19 POLICIES:**

During this pandemic, you must abide by all UW policies and public health rules put forward by the City of Laramie (or by Natrona County if at UW-Casper), the University of Wyoming and the State of Wyoming to promote the health and well-being of fellow students and your own personal

self-care. The current policy is provided for review at:  
<https://www.uwyo.edu/alerts/campus-return/index.html>

As with other disruptive behaviors, we have the right to dismiss you from the classroom (Zoom and physical), or other class activities if you fail to abide by these COVID-19 policies. These behaviors will be referred to the Dean of Students Office using the UWYO Cares Reporting Form for Student Code of Conduct processes ([https://cm.maxient.com/reportingform.php?UnivofWyoming&layout\\_id=5](https://cm.maxient.com/reportingform.php?UnivofWyoming&layout_id=5)).

**Syllabus Changes:** I will alert you to any possible course format changes in response to UW decisions about community safety during the semester.

**HyFlex, Zoom, and WyoCourses expectations:**

As with all UW coursework, this course will be educational and useful to you. I will respond to questions, concerns, and feedback in a timely manner.

Your responsibilities:

- Give and receive feedback from me and your classmates respectfully and constructively in all interactions. This includes in Zoom chats, on WyoCourses boards, and within physical classroom spaces.
- Actively engage in civil discourse in a respectful manner. Use professional language in all course related forums.
- Communicate professionally. Whenever you send class-related email or messages, please include a clear, specific subject line and use the body of the email or message to explain the purpose for the email and any attached materials. Conduct yourself professionally.
- Meet assignment deadlines. We expect that you're interacting with course material multiple times during the week.
- Ask for help when you need it. For academic assistance for this course please contact me for available resources. For Dean of Students assistance please see:  
<https://www.uwyo.edu/dos/student-resources/covid-19-student-resources.html>
- Please let us know if you notice another student who needs help in our (anonymous) WyoCares referral option (<https://www.uwyo.edu/dos/students-concern/index.html>).

**Information Technology (IT):** If you have any IT related challenges, please contact the UWIT Service Center: <https://uwyo.teamdynamix.com/TDClient/1940/Portal/Requests/ServiceDet?ID=8890>

**GRADES**

- A: 90.0 – 100.0
- B: 80.0 – 89.9
- C: 70.0 – 79.9
- D: 60.0 – 69.9
- F: <60.0

The +/- system is not used by the School of Pharmacy. Graduate students, including those enrolled in the Master of Science in Health Services Administration, must maintain a 3.00 GPA

(B or better). Note: there is no rounding of grades – an 89.9 is not 90.

Critique 1 of literature	25 points
Critique 2 of literature	25 points
Critique 3 of literature	25 points
Class participation	50 points
Mid-term examination	50 points
Final examination	<u>50 points</u>
Total points	225 points

**COURSE SCHEDULE:**

Class will be held on Sunday at 5:00 pm Wyoming time. They will generally last about 3 academic hours (i.e., 150 minutes) with a break.

	<b>Module</b>	<b>Topics</b>	<b>Chapters</b>	<b>Assessment</b>
<b>March 7</b>	1	Introduction  Measuring and Estimating Costs	1 and 2	
<b>March 14</b>	2	Critiquing Research Articles  Cost-Minimization Analysis	3 and 4	
<b>March 21</b>	3	Cost-Effectiveness Analysis  Cost-Utility Analysis	5 and 6	
<b>March 28</b>	4	Cost-Benefit Analysis  Health-Related Quality of Life: Health Status Measures	7 and 8	Critique 1  Mid-Term Exam
<b>April 4</b>	5	Decision Analysis  Markov Modeling	9 and 10	Critique 2
<b>April 11</b>	6	Real-World Data/Real-World Evidence  Budget-Impact Analysis	11 and 12	
<b>April 18</b>	7	Pharmacy Services, International Perspective Future Issues	13, 14, and 15	Critique 3
<b>April 25</b>				Final Exam