

PHCY 6343: PHARMACOECONOMICS
COURSE OUTLINE
SPRING 2010

(Schedule is tentative and topic dates are subject to change; additional readings may be assigned as appropriate)

DATE	TOPICS
January 12	Course Administration Research Design Review
January 14 January 19	Outcomes Research using Evidence-based Medicine Readings: Brozek JL, Aki EA, Alonso-Coello P, Lang D, Jaeschke R, Williams JW et al. Grading quality of evidence and strength of recommendations in clinical practice guidelines: An overview of the GRADE approach and grading quality of evidence about interventions. <i>Allergy</i> 2009; 64: 669-77. Balk EM, Uhlig K, Using GRADE for international guidelines on kidney disease. [Commentary on the Internet] Rockville MD: National Guideline Clearinghouse. 2009 Jan 4 [cited 2010 Jan 8]. Available from http://www.guideline.gov/expert/commentary.aspx?file=GRADE_Kidney_Disease.inc Ho PM, Peterson PN, Masoudi FA. Evaluating the evidence: Is there a rigid hierarchy? <i>Circulation</i> , 2008; 118: 1675-84. Retrospective Databases (Chapter 11, pages 177-195)
	Statistics Review Readings: Chu K. An introduction to statistics, significance testing and the P value. <i>Emerg Med</i> , 1999; 11:28-34. Elenbaas RM, Elenbaas JK, Cuddy PG. Evaluating the Medical Literature Part II: Statistical Analysis, <i>Ann Emerg Med</i> , 1983; 12:35-45.
January 21 January 26	Quiz 1 (first hour) Introduction to Outcomes and Pharmacoeconomics Readings: Introduction (Chapter 1, pages 1-8), International Perspective (Chapter 13, pages 217-26), Future Issues (Chapter 14, pages 227-36)
	Measuring and Estimating Costs and Outcomes Reading: Measuring and estimating costs (Chapter 2, pages 9-13, 17-23); Kozma CM, Reeder CE, Schulz RM, Economic, clinical and humanistic outcomes: A planning model for pharmacoeconomic research. <i>Clin Ther</i> 1993;15: 1121-32.
January 28	Quiz 2 (first 30 minutes) Cost of Illness Reading: Introduction (Chapter 1, pages 6-7) Cost Minimization Reading: Cost-Minimization Analysis (Chapter 4, pages 35-45)

January 28 (continued) February 2	Cost-Benefit Analysis Readings: Cost-Benefit Analysis (Chapter 7, pages 115-30) Measuring and estimating costs (Chapter 2, pages 13-7) Sensitivity Analysis Readings: Decision Analysis (Chapter 9, pages 139-43) Cost-Benefit of Pharmacy Services (Chapter 12, 197-215)
February 4	Quiz 3 (entire class)
February 9	Decision Analysis and Markov Modeling Readings: Decision Analysis (Chapter 9, pages 135-53) Markov Modeling (Chapter 10, pages 155-75) DUE: February 9—Detailed outline of final project; submit electronically on WyoSakai by 10:25am
February 11	Cost-Effectiveness Analysis Reading: Cost-Effectiveness Analysis (Chapter 5, pages 47-65) Cost-Utility Analysis Reading: Cost-Utility Analysis (Chapter 6, pages 67-87)
February 16	Quiz 4 (entire class)
February 18 February 23	Psychometric Theory Reading: Myers K, Winters NC. Ten-year review of rating scales: I: Overview of scale functioning, psychometric properties, and selection. <i>J Am Acad Child Adolesc Psychiatry.</i> 2002; 41: 114-22
February 25 March 2	Health-related Quality of Life: Health Status Measures Reading: Health-related Quality of Life: Health status measures (Chapter 8, pages 111-34) Pharmacoeconomics in the real world
March 4	Quiz 5 DUE: Final Project

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Pharmacoeconomics is a two-semester hour course designed to provide the student with the techniques to evaluate and calculate health care economic data for the purpose of applying the knowledge to provision of pharmacist-provided care to patients as well as to development of health policy.

Prerequisites: PHCY 6250 (Drug Literature Evaluation); Stat 2050 or equivalent

COURSE OBJECTIVES:

By the end of the course, the student should be able to

- Apply the techniques of economic and outcomes research
- Appraise the appropriate use of data as well as its relationship and applicability to the provision of pharmaceutical care to patients
- Use appropriate methods of assessment (including research models and statistical methods) to participate in individual and group activities
- Apply the concepts from the class to a mock grant proposal

Specific (Behavioral) Objectives

Cognitive Objectives

- Recognize the appropriate use of pharmacoeconomic techniques
- Identify the limitations of any technique
- Apply the techniques based on current best evidence

Skill Objectives

- Apply economic techniques using supplied data
- Participate fully in pharmacoeconomic discussion and case analysis

Attitudinal Objectives

- Appreciate the limitations of medical and pharmacy economic literature
- Provide the best recommendations despite literature limitations
- Consider the organization's and the individual's needs when constructing recommendations

REQUIRED TEXT: Rascati KL, Essentials of Pharmacoeconomics, Philadelphia PA:Wolters Kluwer Health; Lippincott Williams & Wilkins, 2009

REQUIRED CALCULATOR: Pharmacoeconomics is a mathematics-based discipline. A scientific calculator is required for all class sessions. 5% will be deducted from any quiz if an individual does not bring an adequate calculator.

CLASS WEBSITE:

The course website is accessible from the WyoSakai site. Copies of class slides will be posted on this site. After the first session, copies of the slides will not be provided. If you wish to use them for taking notes, they will be available by Tuesday evening preceding the Thursday session and Friday evening preceding the Tuesday session.

AUDIENCE:

This course is required for students in the third year of the Doctor of Pharmacy program (PH3); these students must have a basic understanding of biostatistics (as provided by STAT 2050), drug literature evaluation and research design (as provided by PHCY 6250).

COURSE PROCEDURES:

The course instructor is Linda Gore Martin, Pharm.D. The course meets on Tuesday and Thursday from 10:25a.m. -12:15p.m. in HS 427.

CLASSROOM PROCEDURES:

Instructional procedures consist of lecture, discussion, participation exercises plus assigned readings and projects (See Lecture Outline).

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.

In order for a discussion or dialogue to be successful, students must have read the assigned readings or have completed the assignment **before** coming to class.

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

INSTRUCTOR AVAILABILITY:

Office hours for Dr. Martin (Room HS465A, 766-6128, druginfo@uwyo.edu) will be Tuesday and Thursday 1:00-3:00pm. Other hours are available by appointment. Alternative times will be announced if needed. Electronic mail will be answered within 24 hours during school days (that is, if received at 10am on Friday, it will be answered by 10 am on Monday).

Students who qualify under the American Disabilities Act should see the Student Educational Opportunity (SEO) office located at Knight Hall (Room 330, telephone 766-6189) immediately to complete paperwork for any needed accommodations.

ACADEMIC DISHONESTY, DISCRIMINATION AND HARASSMENT WILL NOT BE TOLERATED!

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/generalcounsel/support/Student%20Code%20of%20Conduct.pdf>]

University of Wyoming Regulations

[<http://www.uwyo.edu/generalcounsel/support/clean%20uw%20regulations/UW%20Reg%206-802.pdf>]

School of Pharmacy Honor Code [WyoWeb, Groups, Pharmacy Students, SAC Policies and Forms, Files]

GRADES

Normally, the course grades would be assigned and students evaluated in accordance with standard University policies (A = Exceptional; B = Very Good; C = Acceptable; D = Poor; and F = Failure). This mechanism allows for flexibility and internal statistical comparison. However, because of a decision made at the College of Health Sciences level this past year, this system will have numbers assigned at the beginning of the semester to each grade; standard mathematical rounding will be used and grades will not be negotiable. The numerical system shall not be interpreted as the "Official School of Pharmacy Grading Policy," each instructor in the School of Pharmacy may determine their own system and any questions concerning the system for a particular course should be asked during the first session.

The numbers assigned to the grades for spring 2010 shall be A=90 and above, B=80 and above; C=70 and above; D=60 and above; F=below 60.

Quizzes --(five total)-----250 points
Project Proposal -----150 points

Quizzes may include objective (multiple choice and true-false), short essay, and problem-solving questions.

The final project will be an economic study proposal. The assignments will be given out in class on January 14 and will be due at the beginning of class on March 4 (10:25am via WyoSakai); a detailed outline will be due on February 9 (this will be turned in as a hardcopy). Final projects turned in by noon on March 5 will be graded, but will lose 15%. No final projects will be accepted after that time.

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Spring 2010

I, _____(please print), understand that Linda Gore Martin, class instructor, may wish to use materials produced by me in this class. I understand that choosing not to allow my materials to be used will not affect my grade in this class. I further understand that any work (with the exception of pictures) will have all names removed before use. No other person will have authority to use any of my materials.

Please initial next to the appropriate options.

WRITTEN MATERIALS

___Dr. Martin may put my written materials into a portfolio for assessment of her teaching by tenured faculty members or use my materials for appropriate workshops and meetings concerning teaching techniques.

___Dr. Martin may NOT put my written materials into a portfolio for assessment of her teaching by tenured faculty members or use my materials for appropriate workshops and meetings concerning teaching techniques.

PICTURES OR VIDEO

___Dr. Martin may use any pictures or video images taken during class time featuring myself and/or my work for appropriate workshops and meetings concerning teaching techniques or posting on websites.

___Dr. Martin may NOT use any pictures or video images taken during class time featuring myself and/or my work for appropriate workshops and meetings concerning teaching techniques or posting on websites.

Signature_____

Date_____