COURSE INFORMATION

Cost Effectiveness Analysis in Health and Healthcare
POP HLTH 875 001 ( 3 Credits )
Spring 2017-2018 [1184]

Description
Basic ideas and tools of cost effectiveness analysis as applied in evaluating medical technologies. Addresses special problems and methods in assessing diagnostic technologies, including ROC analysis, and in measuring health for technology assessment. Uses ‘classical’ and current journal literature.

Prerequisite(s)
POP HLTH/SOC 797 and B M I/POP HLTH 552

Instruction Mode
Classroom Instruction

Canvas Course URL
https://canvas.wisc.edu/

How the Credit Hours are Met
The credit standard for this course is met by an expectation of a total of 135 hours of student engagement with the courses learning activities (45 hours per credit), which include regularly scheduled instructor: student meeting times (one 150-minute class meeting per week), reading, writing, problem sets, and other student work as described in the syllabus.

INSTRUCTORS AND TEACHING ASSISTANTS

Instructor

DAVID VANNES
DVANNESS@WISC.EDU

Instructor Availability
Office hours available by email request.

GRADING AND COURSE MATERIALS

Course Learning Outcomes
Apply basic concepts of economic analysis to the assessment of medical technologies and healthcare interventions more broadly;  
[S4408]

Conceptualize health outcomes on a range from objective measures of physical systems to subjective preference-based measures of health utility and describe the benefits and limitations of using quality-adjusted life years (QALYs) as a health outcome measure;  
[S4409]

Explain why we seek to obtain estimates of the “opportunity cost” of using health care resources, describe the process of “costing” in economic assessments of medical technologies and identify useful sources of information for obtaining cost information (and their limitations);  
[S4410]

Describe how primary data from randomized controlled trials and observational studies can be designed to assess medical technologies and explain the advantages and disadvantages of different designs in terms of their internal and external validity and decision-relevance;  
[S4411]

Describe how evidence from secondary data can be integrated using meta-analysis and decision-analytic modeling methods to assess medical technologies and demonstrate basic ability to design and execute simple decision tree and Markov models for cost-effectiveness analysis.  
[S4412]

Grading

Points will be allocated to the discussion questions, take-home exams and final report according to the schedule on the last page of the syllabus. Final grades will be assigned according to the following scheme:

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<thead>
<tr>
<th>Points</th>
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<tbody>
<tr>
<td>900 – 1000</td>
<td>A</td>
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<tr>
<td>860 – 899</td>
<td>AB</td>
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<td>800 – 859</td>
<td>B</td>
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<td>700 - 799</td>
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<td>&lt;700</td>
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Required Textbook, Software, & Other Course Materials

Except for the first lecture, you are expected to read all core readings and discussion papers and to watch all required video presentations prior to coming to class. All readings will be available online through links on the Canvas website. If a link does not work for you, please contact me as soon as possible.

EXAMS, QUIZZES, PAPERS & OTHER MAJOR GRADED WORK

Exams, Quizzes, Papers & Other Major Graded Work

A final presentation of an article critique will be worth 30% of your final grade. Students who expect to miss class on presentation day (5/2) should contact me immediately to make alternative arrangements. An opportunity will be given for students to recoup lost points on the article critique by providing a written response to instructor queries by 8pm on 5/9.

Homework & Other Assignments

There will be 7 homework assignments throughout the semester; cumulatively, these will be worth 70% of your final grade. Homework assignments should be submitted through Canvas.

ACADEMIC POLICIES

ACADEMIC INTEGRITY

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison’s community of scholars in which everyone’s academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to https://conduct.students.wisc.edu/academic-integrity/

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

McBurney Disability Resource Center syllabus statement: “The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA.” http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php
**DIVERSITY & INCLUSION**

**Institutional statement on diversity:** "Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world." [https://diversity.wisc.edu/](https://diversity.wisc.edu/)