The University Of Toledo
NEW COURSE PROPOSAL

1. College: Pharmacy
   Department: Pharmacy Practice (PHPR)

2. Contact Person: Diane Cappelletty
   Phone: 383-1957 Email: diane.cappelletty@utoledo.edu

3. Alpha/Numeric Code (subject area - number): PHPR-5610

4. Proposed title: Pharmacoeconomics and Outcomes Research I
   Proposed effective term: Spring 2014

5. Planned enrollment per section: 15 per term: 15

6. Is the course cross-listed with another academic unit? No
   Is the course offered at more than one level? No
   If yes to either question, please list additional Alpha/Numeric codes:
   a. __ __ __ __ __ __ __ __ __
   b. __ __ __ __ __ __ __ __ __
   c. __ __ __ __ __ __ __ __ __
   Approval of other academic unit (signature) ____________________________
   Name and title __________________________________________________________________
   If course is to be offered at more than one level, attach an explanation of the different requirements that students must meet at each level. If the requirements are the same for each level, justification must be provided.

7. Credit hours: Fixed: 2 or Variable: ________ to ________

8. Delivery Mode:
   a. Activity Type* Lecture __________ Secondary __________ Tertiary __________
   b. Credit Hours 2 __________
   c. Weekly Contact Hours 2 __________

9. Terms offered: Fall X Every Year __________ Spring __________ Summer __________
   Years offered: X Alternate Years __________

10. Are students permitted to register for more than one section during a term? X No ________ Yes ________
    May the course be repeated for credit? X No ________ Yes ________
    Maximum Hours ________

11. Grading system:
    Undergraduate
    X Normal Grading (A-F, PS/NC. PR, I)
    X Passing Grade/No Credit (A-C, NC)
    X Credit/No Credit
    X Grade Only (A-F, PR, I)
    X Audit only
    X No Grade
    Graduate
    X Normal Grading (A-F, PS/NC. PR, I)
    X Grade Only (A-F)
    X Satisfactory/Unsatisfactory (G only)
    X Audit only
    X No Grade

12. Prerequisites (must be taken before): a.  
    b.  
    Co-requisites (must be taken together): a.  

13. If course is to replace an existing, course(s) will be deleted, and when should that deletion occur?
    a.  
    b.  
    Date Added: 5/4/13
    Council Approved: 10/15/13
    To Provost: 10/29/13

14. Catalog description (75 words maximum).
    This course emphasizes advanced concepts, methods and practical procedures for pharmacoeconomic analysis and outcome research. The student will learn through readings and experience assessment of patient health status, quality of life, satisfaction, cost-effectiveness for pharmacoeconomic and health outcomes research and interpretation of economic and outcomes data.
    Form revised August 29, 2012
15. Attach a copy of a complete outline of the major topics covered. (Providing a syllabus that includes this information is acceptable.)

16. Where does this course fit in the University/College/Department curriculum? (Be specific by course level, if applicable). Indicate prospective demand.
   This is an elective course in the MS in Pharmacy and Healthcare Administration. In addition it is an elective in the PharmD program. We anticipate 15 students annually to enroll.

17. If the proposed course is similar to another course in the College or University, please describe the difference and provide a rationale for the duplication. *(If this course duplicates material covered in another course within your department or college or in another college, attach a letter of endorsement from that area's dean and department chairperson indicating their support. Clarify the manner in which this course will differ).*

18. If the course is intended to meet a University Undergraduate Core requirement, complete the following:
   Please attach syllabus and explain how this course fulfills the general education guidelines. *(Guidelines are available from Faculty Senate Office, UH 3320, x2112 or x2182.)*

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**Course Approval:**

<table>
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<tr>
<th>Department Curriculum Authority:</th>
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<th>Date</th>
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<tr>
<td>Department Chairperson:</td>
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<td>9-18-13</td>
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<td>College Curriculum Authority:</td>
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<tr>
<td>College Dean:</td>
<td>Wayne R. Harr</td>
<td>Date</td>
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<td>Office of the Chancellor:</td>
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[Signature: Graduate Council, Dean of Graduate Studies 10-15-2013]
The University of Toledo
Course: PHPR 5610
Pharmacoeconomics and Outcomes Research 1
Spring Semester 2014

Syllabus

Course Instructor
Varun Vaidya, Ph.D.
Assistant Professor
Sharrel Pinto, Ph.D.
Associate Professor

Course TA’s:
TBA

Course Goal: This course emphasizes introductory concepts, methods, and practical procedures for pharmacoeconomic analysis and outcomes research. The student will understand and develop instruments for assessing patients' health status, quality of life, satisfaction and cost-effectiveness for pharmacoeconomic and health outcomes research.

Objectives

- Understand the role of outcome research and pharmacoeconomics in the evaluation of pharmaceutical and pharmacy services.
- Identify and describe different types of clinical, economic, and humanistic outcomes and their evaluations.
- Describe the methods, steps, and techniques used to conduct pharmacoeconomic evaluations.
- Be able to read, interpret, and evaluate published pharmacoeconomic studies.
- Conceptually define the meaning and purpose of outcomes research.
- Understand the role of epidemiology, health economics and database and information technology in conducting outcomes research.
- Evaluate the usefulness and utility of outcomes measures.
- Recognize the different types of measures used in outcomes research, including clinical, health status, quality-of-life, work/role performance, health care utilization, and patient satisfaction.
PHPR 5610 COURSE OUTLINE

The following topics are slated for discussion over the course of the semester. This document is only a plan, therefore, depending on time, guest speaker availability, and other circumstances, some topics may be omitted and additional topics may be covered.

Module 1  Overview of the US Healthcare System
Module 2  Introduction to pharmacoeconomics
Module 3  Relevant cost and consequences associated with pharmacy products and services
Module 4  Cost of Illness Analysis
Module 5  Cost Minimization Analysis (CMA)
Module 6  Cost Benefit Analysis (CBA)
Module 7  Cost Effectiveness Analysis (CEA)
Module 8  Cost Utility Analysis (CUA)
Module 9  Application: Evaluating the Economic Literature
Module 10 Introduction to Outcomes Research
Module 11 Instruments for assessment
Module 12 Instruments for assessment

IMPORTANT DATES:
Exam I  Week 3
Exam II  Week 6
Graduate Assignment  Week 9
Final Exam  Finals week

GRADING CRITERIA

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<td>Graduate Assignment</td>
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<tr>
<td>Final Exam</td>
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Total Points  450 pts

GRADING SCALE

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<td>B+</td>
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The grading scale will be followed strictly. Grades will not be “curved”. Students will have ample opportunity to perform well in this course with good attendance and participation.

Class participation is greatly encouraged. The instructor welcomes questions and comments.