## Syllabus

**PHC 7XXX: Applications in Health Economics**  
**Spring 2011**

### Course Description:
This course is divided into three sections:  
(1) In depth, economic evaluation techniques, including cost-benefit, cost-effectiveness, and cost-utility analysis;  
(2) A critical review of selected peer reviewed empirical studies;  
(3) Students will use a large dataset to carry out a testable hypothesis using established empirical methods, and also estimate an effect size associated with a predefined health services or health policy intervention.

### Credit hours:
3

### Pre-Requisites:
PHC 6430

### Time:

### Location:
CPH 2143

### Instructor Information:

<table>
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<tr>
<th>Instructor 1</th>
<th>Instructor 2</th>
<th>Mailing Address</th>
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Tampa, Florida 33612  
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### Teaching Assistants
NA

### Required Materials
There is not a textbook for this course. All reading material (chapters and articles) will be made available to students in an online packet.

### Course Format:
This course is divided into three sections. The first section will cover, in depth, economic evaluation techniques, including cost-benefit, cost-effectiveness, and cost-utility analysis. This is to provide students with the theoretical basis and general guiding framework (not a blueprint) for evaluating policies and/or interventions and will be carried out in lecture format. The second part will consist of a critical review of selected peer reviewed empirical studies. The main criteria for selection of studies for this section are (a) the use of a secondary dataset, and (b) the empirical methods used to estimate effect sizes. This will expose students to the research uses of such datasets, an example of which will form the basis of the third section. In the final section of the course, students will use a large dataset to carry out a testable hypothesis using established empirical methods, and also estimate an effect size associated with a predefined health services or health policy intervention.
Learning Objectives
After successfully completing this course, students will be able to:
1. Critically evaluate economic and/or empirical evaluations
2. Execute a systematic empirical evaluation of a health services or health policy evaluation using a secondary dataset.
3. Evaluate health care regulation (from an economic perspective).

Assessment Strategies
Assessment will include:
1. Critical review of a complete and structured research paper.
2. Presentation and defense of their research paper.

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<thead>
<tr>
<th>Competency</th>
<th>Learning Objectives</th>
<th>Assessment Strategies</th>
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<td>2) Apply in-depth disciplinary knowledge and skills relevant to health services research, and pose innovative and important research questions, informed by systematic reviews of the literature, stakeholder needs, and relevant theoretical and conceptual models.</td>
<td>1,2,3</td>
<td>1,2</td>
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<td>4) Select appropriate interventional (experimental and quasi-experimental) study designs to address specific health services research questions, and use appropriate analytical methods to clarify associations between variables and to delineate causal inferences.</td>
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<td>1,2</td>
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<td>6) Know how to assemble secondary data from existing public and private data sources.</td>
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<td>2</td>
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<td>8) Implement research protocols with standardized procedures that assure reproducibility of the science.</td>
<td>1,2,3</td>
<td>1</td>
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<td>9) Assure the ethical and responsible conduct of research in the design, implementation, and dissemination of health services research.</td>
<td>1,2,3</td>
<td>1,2</td>
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Grading Scale and Criteria
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<tr>
<th>Requirement</th>
<th>Points</th>
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<tbody>
<tr>
<td>1. Class Participation</td>
<td>20</td>
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<td>2. Research Paper</td>
<td>60</td>
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<tr>
<td>3. Presentation of Paper</td>
<td>20</td>
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Course Grading Scale
| 90% of total points | A     |
| 80% of total points  | B     |
| 70% of total points | 60% of total points | C | D |

**Classroom Participation:** Students are expected to participate in classroom discussions. Tact, diplomacy, and objectivity when commenting on or critiquing statements by other students is also expected.

**Research Paper:** Each student will complete a research paper on an instructor-approved topic.

**Presentation:** Students will orally present their paper and respond to questions from their cohorts.

**Grading Scale:** There is no grading scale. The students’ grades will be based on participation and the production of a research paper.

**Grading Policies:**

1. Grades will be based on participation and the production of a research paper.
   - The research paper topic will be selected by each individual student with approval from the instructor.
   - The research paper must be empirical and must produce new knowledge, using either secondary or primary data.

2. No individual extra credit work is possible.

**COURSE POLICIES**

**Attendance:** In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include Blackboard and email messaging and/or an alternate schedule. It is the responsibility of the student to monitor the Blackboard course site for specific communication, as well as the main USF, College, and department websites, emails, and MoBull messages for important general information.

**Restrictions on Use of Lectures:** All unauthorized recordings of class are prohibited. Recordings that accommodate individual student needs must be approved in advance and may be used for personal use during the semester only; redistribution is prohibited.

**Instructor Expectations:** In part one of the course, students are expected to participate in all course discussions. For part two of the course, students are expected to independently learn a statistical software program (e.g. SAS) to carry out required estimation(s).

**Incomplete Policy:** COPH policy: [http://publichealth.usf.edu/academicaffairs/academic_procedures.html](http://publichealth.usf.edu/academicaffairs/academic_procedures.html)

**Class Participation:** Students are expected to complete a research paper and presentation of that paper.

**USF POLICIES**
Academic Dishonesty: Plagiarism is defined a “literary theft” and consists of the un-attributed quotation of the exact words of a published text, or the un-attributed borrowing of original ideas by paraphrase from a published text.

Academic Dishonesty and Disruption of Academic Process: Students attending USF are awarded degrees in recognition of successful completion of coursework in their chosen fields of study. Each individual is expected to earn his/her degree on the basis of personal effort. Consequently, any form of cheating on examinations or plagiarism on assigned papers constitutes unacceptable deceit and dishonesty. Disruption of the classroom or teaching environment is also unacceptable. This cannot be tolerated in the University community and is punishable, according to the seriousness of the offense, in conformity with this rule.

Plagiarism: Plagiarism is defined as “literary theft” and consists of the un-attributed quotation of the exact words of a published text, or the un-attributed borrowing of original ideas by paraphrase from a published text. On written papers for which the student employs information gathered from books, articles, web sites, or oral sources, each direct quotation, as well as ideas and facts that are not generally known to the public at large, or the form, structure or style of a secondary source must be attributed to its author by means of the appropriate citation procedure. Only widely known facts and first-hand thoughts and observations original to the student do not require citations. Citations may be made in footnotes or within the body of the text. Plagiarism also consists of passing off as one’s own segments or the total of another person’s work.

Instructions to submit an assignment using Safe Assignment.
http://itt.usf.edu/technology/plagiarism/studentman.pdf

Holidays & Religious Observance: USF Student Rights/Responsibilities:
http://www.sa.usf.edu/handbook/rights/StudentRightsResponsibilities.htm

Special Accommodation
It is the policy of the University of South Florida to accommodate students with disabilities pursuant to federal and state law. Any student with a disability who needs special accommodation should inform the instructor at the beginning of the course.
http://www.asasd.usf.edu/index.htm
Students: http://www.sds.usf.edu/Students.htm
Faculty: http://www.asasd.usf.edu/faculty.htm

Emergency Preparedness
In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of
instruction through methods that include but are not limited to:
Blackboard, Elluminate, Skype, and email messaging and/or an alternate
schedule. It’s the responsibility of the student to monitor Blackboard site
for each class for course specific communication, and the main USF,
College, and department websites, emails, and MoBull messages for
important general information.

Student
Grievance
Procedure:
Review USF Academic Grievance Policy at:

Review USF Academic Grievance Procedure at: (taken from the current Undergraduate
Catalog) http://www.ugs.usf.edu/catalogs/0607/arcsagp.htm
Also available in the 2007-2008 Graduate Catalog (pg.97-100 of 856)

Review the Office of Student Relations Grievance Procedure at:
http://www.sa.usf.edu/SA/Student%20Grievances.pdf
SCHEDULE OF LECTURES, READINGS AND ASSIGNMENTS

Outline

Section I: Economic Evaluation Methods (weeks 1, 2, 3)

1. Cost Benefit Analysis – Principles (review from health economics I)
2. Health care & Medical care costs (discussion will be based on class handout - lecture format)
3. Cost Effectiveness Analysis (discussion will be based on class handout - lecture format)
4. Cost Utility Analysis (discussion will be based on class handout - lecture format)
5. The principles of CBA: Willingness to Pay


6. The principles of CBA: Discounting


7. Case study: neonatal intensive care


Section II: Research and an administrative dataset (weeks 4, 5)

The articles in this section all relate to Florida. With one exception, they used the AHCA inpatient data set for analysis and estimation. Each student will be responsible for closely reading at least two of these articles to present to the rest of the class. The objective is to get a sense of (a) potential uses of the specific administrative data set and (b) research specific to the related geographic setting - Florida. The articles were not selected based on scientific or methodological rigor or validity … just as illustrations of the use of the administrative dataset.

1. Selection of articles will be up to you (students). Don’t worry about interest area(s) at this point. If you happen to be interested in a specific topic area covered by an article and it has already been claimed, you can negotiate (beg, plead, grovel … any non-violent approach will be allowed) with your colleague, or you may also read the article and add to the discussion. Please send an e-mail to all involved with your selection (I will make the e-mail addresses available) at your earliest convenience but before the end of section I (estimated to be 3 weeks long).

2. When you read the article, pay particular attention to (a) how the dataset was used – e.g. which variables, existing or derived, (b) which supplemental data sources were used, (c) how the researchers went about answering the question at hand, (d) and the weaknesses of the research. In addition, pay attention to the “why” part. This has to do with the conceptual element that will become important in the third section of the course. If the author(s) provided a reason why they believed the research to be important, or how it adds to the current knowledge base, your job in this regard is done, unless you can think of other reasons; otherwise, please devote some thought to it.

3. Several of the included articles are by a specific author you may recognize. If you happen to be interested in the associated areas of research, feel free to select one of these articles. Otherwise, the author will make a personal appearance to present his work.

Articles to be reviewed (may be changed as students develop specific interest areas)


Section III: Research paper development (weeks 6-10)

1. Specific literature review and identification of additional required data
2. Specific patient profile (descriptive statistics)
3. Inferential statistical methods
4. Presentation of paper (in proper English please) and critical review

PRESENTATION

- A brief discussion of the topic.
- What particular questions / hypotheses did you focus on?
- Why was it important to research these questions / hypotheses?
- What were the findings and conclusions?