Course Overview

The purpose of this course is to provide students with the ability to apply the principles of economic theory for the analysis of health related consumption and production decisions made by individuals and firms. Specifically, this course will introduce students to the use of economic supply, demand and market structure frameworks to explain the allocation, utilization, outcomes and cost of resources in the health care sector. Concepts covered include: (1) the role of tradeoffs and incentives in decisions by individuals and households about their health and use of health care services; (2) health care inputs, production and provision; (3) health insurance markets; (4) firm competition, integration and consolidation; and (5) the role of government in the health sector.

The insights gained from understanding the application of basic economic theory to the health care industry are crucial for assessing the value created by health services and treatment options for health services management, planning and policy decision making. Economic theory is also useful for anticipating the effects of allocation decisions on health services firm performance and facilitating the ability to predict changes in production and consumption behavior of competitors, consumers and suppliers in response to changing demographic, technological and policy environment circumstances.

This course is designed to focus on descriptive, explanatory and evaluative economics to provide a foundation for analyzing health management and policy decisions. Behavior patterns
and motivations for all decision makers in the market - suppliers as well as demanders – will be examined.

The goals of the course are for students to 1. Apply basic microeconomic theory to health economics 2. Learn empirical methods for studying health resource management and policy questions 3. Interpret and critically evaluate empirical research 4. Understand how to apply economic principles to a range of health management and policy questions
### Learning Objectives and HPM Competencies

<table>
<thead>
<tr>
<th>Course Learning Objective</th>
<th>HPM Competencies</th>
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<tbody>
<tr>
<td>1. Discuss the unique aspects of health care as a “good” and how these aspects affect the performance of the health care “market”.</td>
<td>Analytical Thinking</td>
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<tr>
<td>2. Distinguish the goals and objectives of various stakeholders in the health care industry (patient, the provider, payer, and regulator) and apply quantitative tools to compute solutions that achieve those goals.</td>
<td>Information Seeking Performance Measurement</td>
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<tr>
<td>3. Compare and contrast the different measures of economic ‘value’ and how value can influence decision making</td>
<td>Performance Measurement Strategic Orientation</td>
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<tr>
<td>4. Possess a critical understanding of the strengths and limitations of the application of economics to describe and interpret the health care sector.</td>
<td>Analytical Thinking</td>
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<tr>
<td>5. Describe the role of information and uncertainty in the market for health care</td>
<td>Analytical Thinking</td>
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<td>6. Differentiate the roles and relationships between various principals and agents in the health care sector.</td>
<td>Analytical Thinking</td>
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<tr>
<td>7. Compare and contrast the health care sector and the model of perfectly competitive markets and describe the impact of political, legal, regulatory, and bureaucratic influences on the health care sector.</td>
<td>Analytical Thinking Systems Thinking</td>
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<tr>
<td>8. Explain the likely consequences of interventions into the health care sector and their implications relative to the expected perfectly competitive market equilibrium.</td>
<td>Analytical Thinking Innovative Thinking</td>
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<tr>
<td>9. Critically evaluate empirical economic evaluation studies</td>
<td>Information Seeking Analytical Thinking</td>
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Resources:

Website
HPM 715 has its own website using Sakai software. (www.unc.edu/sakai). The course is listed as: HPM715.001.FA15. This website will contain lecture notes, class discussion questions, information for group assignments, discussion forums, and other supplemental materials.

Principal Textbook

*Note: Although this textbook presents a comprehensive treatment of the application of economic concepts to various sectors of the health care industry, its coverage of basic economic principles is rather cursory and superficial. I will be posting some tutorial notes on basic microeconomic principles to the Sakai site that will supplement the underlying economic concept coverage in the text. I encourage you to look those over, especially students with a limited background in Economics, particularly Microeconomics (or those for whom it may have been a while since studying Microeconomics). In addition, you may find a basic microeconomic overview guide helpful. A couple examples available through Amazon you may want to look at are:*


Requirements and Expectations:

Class participation

Coming prepared to class with questions from the readings and participating in class discussions will be essential for ensuring that you (and your classmates) get the most out of the materials that will be discussed during the semester. Five percent of your grade will be based on your engagement in the lecture and class discussion. Persistent lateness or absence from class will be noted and will reduce your participation grade.
Small Group Assignments

Group learning enables you to learn from your classmates and is an effective tool to foster discussion and appreciate differing perspectives about the topics introduced in class. In order to help you learn and apply concepts introduced in class and practice applying them to health care policy & management questions, you will be assigned to teams of 4-6 students that will be asked to work on short, in-class problem-solving exercises throughout the semester and outside of class assignments. Exercises will consist of questions based on the readings and on concepts introduced in lecture.

Small group works grades will be based on group led presentations to the class as a whole based on their group work on 3 types of assignments:

1) Problem set solutions: Groups will be assigned to present and lead short class discussions to describe their methodology and solution to 2 - 3 of the in class problem sets

2) Discussion questions: Challenge questions designed to test understanding, foster deeper thinking and practice applying the material presented during that class will be posted to the course website after the lecture. Over the course of the semester, each group will be assigned to lead a 5 – 10 minute discussion on 1 – 3 of these challenge questions at the start of the next class.

3) Research article critique: All groups will be assigned to identify an economic evaluation empirical study paper in week 10. Each group will write a critical summary of their chosen article and post it to a discussion forum on the course website during week 11. Students will then be expected to read and discuss the critiques of the other groups.

13% of your grade will be based on your group discussion and presentations. All group members will receive the same grade. You will evaluate the contributions of your team members at the end of the semester. (An example of the team peer evaluation form is on the course website.) Consistent negative feedback on the peer evaluations may have a negative impact on the course grade.

Quizzes

There will be 2 quizzes that will be based on the lectures and required readings. These will be completed individually, timed, and submitted on Sakai before class and then also completed as a group. (Make sure to bring a print out of your completed quiz with you to class.) 12% of your grade will be based on the quizzes, and equal weight will be given to individual and group scores. These quizzes will give you periodic check-ins on your understanding of concepts before the exams.
Class-Wide Group Project

There is one group assignment for this course that will be described at the beginning of the term. This project will culminate in a class white paper and panel discussion at the end of the term. Intermediate deliverables will be due throughout the term.

Exams

The midterm and final exams each contribute 25% toward your final grade. Exams require students to demonstrate knowledge and comprehension, to apply concepts to specific problems and situations, and to analyze how different concepts, trends, and issues influence health care delivery and policy. Exams cover material from required readings, lectures, discussion forums, and in-class discussions. Additional instructions on the exams will be discussed in class and posted on Sakai at least 1 week before the exam date. If you expect to be unable to take the exams on their scheduled days, you must notify me at the beginning of the semester.

Evaluation / Grading:

Student grades will be a weighted average of six components. The expectation for full credit is demonstration of an understanding and ability to apply the relationships being discussed, not merely recitation of material presented in the readings or lecture. Final course grades will depend on the actual point distribution in the class at the end of the semester.

<table>
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<tr>
<th>Component</th>
<th>% of Grade</th>
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<tr>
<td>Class Participation</td>
<td>5</td>
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<tr>
<td>Group discussion of challenge questions, problem sets &amp; forum postings</td>
<td>13</td>
</tr>
<tr>
<td>2 Quizzes</td>
<td>12</td>
</tr>
<tr>
<td>Group Work on Class Project</td>
<td>20</td>
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<tr>
<td>Midterm</td>
<td>25</td>
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<tr>
<td>Final</td>
<td>25</td>
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Grading Scale

97 to 100 = H+
93 to 96 = H
90 to 92 = H-
87 to 89 = P+
83 to 86 = P
80 to 82 = P-
70 to 79 = L
Below 70 = F
Guidelines on Use of Laptops and Other Electronics in Classroom:

The use of electronic devices in this class is encouraged only for taking notes, or quickly looking up information relevant to the discussion and group problem sets. Since problem sets will frequently be worked on during class, it will be helpful to bring either a basic calculator or an electronic device with calculator function to class.

Please turn off cell-phones during class and limit the use of electronic devices such as laptops and tablets to class-related activities. The use of electronic devices for multi-tasking such as checking e-mail or sending instant messages is inappropriate, rude to the presenter, and inconsiderate to other class members thus can have a negative impact on the class participation component of your grade.

Recognizing, Valuing, and Encouraging Diversity:

The importance of diversity is recognized in the mission statement of HPM. In the classroom, diversity strengthens the products, enriches the learning, and broadens the perspectives of all in the class. Diversity requires an atmosphere of inclusion and tolerance, which oftentimes challenges our own closely-held ideas, as well as our personal comfort zones. The results, however, create a sense of community and promote excellence in the learning environment. This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity.

Diversity includes consideration of: (1) life experiences, including type, variety, uniqueness, duration, personal values, political viewpoints, and intensity; and (2) factors related to “diversity of presence,” including, among others, age, economic circumstances, ethnic identification, family educational attainment, disability, gender, geographic origin, maturity, race, religion, sexual orientation, social position, and veteran status.

Disability Accommodation

UNC-CH supports all reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability, or a pregnancy complication resulting in difficulties with accessing learning opportunities.

All accommodations are coordinated through the UNC Office of Accessibility Resources & Services (ARS), http://accessibility.unc.edu; phone 919-962-8300 or email accessibility@unc.edu. Students must document/register their need for accommodations with ARS before any accommodations can be implemented.
**UNC Honor Code:**

The principles of academic honesty, integrity, and responsible citizenship govern the performance of all academic work and student conduct at the University as they have during the long life of this institution. Your acceptance of enrollment in the University presupposes a commitment to the principles embodied in the Code of Student Conduct and a respect for this most significant Carolina tradition. Your reward is in the practice of these principles.

Your participation in this course comes with the expectation that your work will be completed in full observance of the Honor Code. Academic dishonesty in any form is unacceptable, because any breach in academic integrity, however small, strikes destructively at the University's life and work.

If you have any questions about your responsibility or the responsibility of faculty members under the Honor Code, please consult with someone in either the Office of the Student Attorney General (966-4084) or the Office of the Dean of Students (966-4042).

Read “The Instrument of Student Judicial Governance” (http://instrument.unc.edu).

**Course Evaluation:**

HPM participates in the UNC-CH’s online course evaluation system, enabled at the end of the semester by Scantron Class Climate. Your responses will be anonymous, with feedback provided in the aggregate. Open-ended comments will be shared with instructors, but not identified with individual students. Your participation in course evaluation is an expectation, since providing constructive feedback is a professional obligation. Feedback is critical, moreover, to improving the quality of our courses, as well as for instructor assessment. Students are notified when the evaluation is available online, towards the end of each semester.

**Course Schedule**

<table>
<thead>
<tr>
<th>Major Assignment Dates</th>
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<tbody>
<tr>
<td>9/24</td>
<td>Quiz 1</td>
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<td>10/1</td>
<td>Midterm</td>
</tr>
<tr>
<td>10/8</td>
<td>Group 1 Class Project Presentation</td>
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<tr>
<td>10/22</td>
<td>Group 2,3,4 Class Project Presentation</td>
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<tr>
<td>10/29</td>
<td>Group 5,6 Class Project Presentation</td>
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<tr>
<td>11/5</td>
<td>CEA article critique due; Group 7,8 Class Project Presentation</td>
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<tr>
<td>11/12</td>
<td>Quiz 2; Group 9,10 Class Project Presentation</td>
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<tr>
<td>11/19</td>
<td>Class Panel Discussion on Group Paper</td>
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<tr>
<td>12/10</td>
<td>Final</td>
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HPM 715.001 8 J. Sakowski
Fall, 2015 UNC-Chapel Hill
### Weekly Schedule

**Week 1  Introduction: Economics & Health Care**

By the end of this week, the student should be able to:

- Understand the structure, objectives and expectations of the course
- Define the goals of economics and its usefulness for analyzing medical decision making
- Identify key economic principles relevant to the health industry
- Explain why health care differs from other industries
- Differentiate between positive and normative questions

**August 20**

Required Reading: Getzen Chapters 1, 15

**Week 2 Production of Health & Health Care**

By the end of this week, the student should be able to:

- Define a production function
- Discuss the concept of substitutability of inputs
- Explain the relationship between productivity, prices and costs
- Calculate cost minimizing input mixes
- Compare the economic objectives of profit and non-profit firms
- Discuss how production decisions vary according to objectives
- Evaluate the role of quality in production decisions
- Examine the factors that influence production decisions

**August 27**

Required Reading: Getzen Ch 2

### Week 3 Demand for Health & Health Care

By the end of this week, the student should be able to:

- Define economic demand and medical care demand
- Discuss the role of uncertainty and information asymmetry in decision making
- Summarize consumer goals for consuming health care
- Examine the factors that influence individual consumption of health services and why it may vary among individuals
- Identify principal-agent relationships in health care
- Describe the impact on prices from non-competitive market structures

### September 3

**Required Reading:**
Getzen, Ch 2


### Week 4 Health Insurance Markets

By the end of this week, the student should be able to:

- Define risk aversion and describe the rationale for purchasing insurance
- Describe the role of insurance on influencing the demand for medical care
- Evaluate the impact of coinsurance and deductibles on consumer behavior
- Define the concepts of moral hazard and adverse selection
- Identify different sources of insurance in the US
- Compare and contrast the structures of various managed care plans

### September 10

**Required Reading:**
Getzen, Ch 4, 5
### Week 5 Health Services Supply: Physicians & other Labor

By the end of this week, the student should be able to:

- Discuss substitutability of labor and restrictions on labor inputs
- Review health services labor supply objectives
- Examine the impact of asymmetric information and uncertainty on provider behavior
- Introduce the concept of supplier induced demand and identify factors that facilitate it
- Discuss the impact of reimbursement policies on provider decisions
- Examine rationales for formation of medical groups

**September 17**

**Required Reading:**
Getzen, Ch 6

**Recommended Reading:**

### Week 6 Health Services Supply: Hospitals and Long Term Care

By the end of this week, the student should be able to:

- Compare objectives of for profit and not for profit institutions
- Differentiate the role of hospitals and LTC facilities from other producers
- Illustrate the ways hospitals and LTC facilities compete
- Examine integration and consolidation

**September 24**

**Required Reading:**
Getzen, Ch 8, 9, 10

**Recommended Reading:**

### Week 7 Midterm

### Week 8 Labor Markets & Health Services Organization

By the end of this week, the student should be able to:

- Explain labor supply decision making
- Discuss barriers to entry in labor market
- Identify factors that influence labor supply location choices and access to services

Define the characteristics of various market structures

**October 8**

**Required Reading:**
Getzen, Ch 7
<table>
<thead>
<tr>
<th>Fall Break – No Class</th>
<th>October 15</th>
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<tr>
<td><strong>Week 9 Pharmaceuticals and Technology</strong>*</td>
<td><strong>October 22</strong></td>
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</table>
| By the end of this week, the student should be able to:  
- Describe the US pharmaceutical market  
- Model the relationship between labor and technology  
- Evaluate methods for assessing new technologies  
- Critique strengths and limitations of existing technology assessment frameworks | Required Reading:  
Getzen, Ch 11  
Recommended Reading:  
| **Week 10 Economic Evaluations/ Value of Information*** | **October 29** |
| By the end of this week, the student should be able to:  
- Calculate cost-effectiveness and cost benefit measures  
- Summarize the strengths and weaknesses of economic evaluation models  
- Interpret economic evaluation study findings  
- Judge the applicability of existing economic evaluations to a particular population or setting  
- Summarize the quality of evidence and value of seeking additional information | Required Reading:  
Getzen, Ch 3  
<table>
<thead>
<tr>
<th>Week 11 Use of Information; Equity &amp; Efficiency*</th>
<th>November 5</th>
<th>Guest Speaker</th>
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<tbody>
<tr>
<td>Required Reading:</td>
<td></td>
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<tr>
<td>Getzen, Ch 1.4, 1.5, 2.9</td>
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<tr>
<th>Week 12 Externalities &amp; Government Intervention/ Comparative Systems*</th>
<th>November 12</th>
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<tbody>
<tr>
<td>Required Reading:</td>
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<tr>
<td>Getzen, Ch 14, 16</td>
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<tr>
<th>Week 13 Recent Major Policy Changes: Health Reform &amp; ACA</th>
<th>November 19</th>
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<tbody>
<tr>
<td>Required Reading:</td>
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<tr>
<td>Getzen, Ch 17, 18</td>
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<tr>
<th>Thanksgiving – No Class</th>
<th>November 26</th>
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| FINAL | December 10 | |

* The order of these topics is subject to change