Objective
This course will teach you how to use advanced microeconomic theory to address practical problems in the policy world. In this course, we will use traditional economic tools to analyze problems in welfare and tax policy as well as inter-governmental transfers. We will review the main results in general equilibrium and welfare economics. We will also critically assess the market mechanism and identify the circumstances under which it leads to inefficient outcomes. We will explore more recent developments in microeconomic theory, including information economics, choice under uncertainty, and game theory. Finally, we will spend some time on strategic behavior and game theory. These techniques and concepts will be applied to an array of economics problems including health insurance, investment in schooling, wage contracts, collective bargaining, and many others.

Prerequisites
The course presumes a working knowledge of advanced microeconomics and multivariate calculus. Most, if not all, students will have completed PLCY 788 in the Fall semester.

Course Readings & Textbooks
There are two required textbooks which are listed below. Most, if not all, of you should already have a copy of Binger & Hoffman, *Microeconomics with Calculus*. If not, order one. This text was used in the first half of this sequence (PLCY 788) and will continue to be used for some applications. The other two texts are probably new books to you, but we will use them both throughout the course:

**Texts**
Other useful textbooks

Aside from the required textbooks, journal articles have been listed under certain sections of the syllabus, and others will be assigned as the class progresses. Finally, the *Journal of Economic Perspectives* often publishes a ‘Policy Watch’ article—a short paper that brings economic analysis to bear on current policy issues in the US economy. Recent topics have included Health Insurance, the Alternative Minimum Tax, the Inheritance Tax, and Disability Insurance. These articles should become part of your regular dose of professional reading and are accessible through the UNC Libraries.

Evaluation Scheme
**Exams:** There will be two exams during the course of the semester, each worth 35% of your final grade. The midterm will be given during a regularly scheduled class period and the final will be given during the final exam period. Together, these exams account for 70% of your final grade.

**Student Presentations:** A small group of students will lead an in-class discussion of an economic journal article (or parts of an economic journal article) to be followed by class discussion. The purpose will be to understand how economic theory is used in applied settings to address public policy issues. The articles will be chosen by the instructor. Your performance on this assignment will be partly determined by participation in the discussion of your classmates’ article presentations. This assignment accounts for 20% of your grade.

**Problem Sets:** Problem sets will be distributed periodically during the semester and will be collected. You may work together in solving these problems but you may not turn in joint assignments or copy assignments verbatim. You must turn in your own individually-worked assignment. Problem set assignments account for 10% of your final grade.

### Key Dates

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<thead>
<tr>
<th>Event</th>
<th>Date(s)</th>
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<tr>
<td>First Day of Class</td>
<td>Tuesday, January 12th</td>
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<tr>
<td><strong>EXAM 1</strong></td>
<td><strong>Thursday, March 4th during class</strong></td>
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<tr>
<td>Spring Break – No Classes</td>
<td>Tuesday, March 9th &amp; Thursday, March 11th</td>
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<tr>
<td>Last Day of Class</td>
<td>Tuesday, April 27th</td>
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<td><strong>EXAM 2</strong></td>
<td><strong>Saturday, May 1st at 12:00 PM</strong></td>
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<td><strong>Final Exam Scheduled Time</strong></td>
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General Topic Outline

The course outline below is tentative and is therefore subject to changes, deletions, and/or additions. I will announce changes to assigned readings in class and occasionally by email.

1. Information Economics
   a. Choices Under Uncertainty and Expected Utility Theory
      BH: Ch. 19
      F: Ch. 7, pages 220-243
   b. Moral Hazard, Adverse Selection, and the Insurance Problem
      BH: Ch. 20, pages 538-548, 553-554
      F: Ch. 7 pages 254-266; Ch. 20 pages 724-732
   c. The Principal-Agent Problem
      BH: Ch. 20, 548-551
   d. Applications to Health and Medical Care (time permitting)

2. Market Equilibrium, Market Failure, and Government Intervention
   a. General Equilibrium and Welfare
      BH: Ch. 9, 14
      F: Ch. 12
   b. Market Failure
      BH: Ch. 21
      F: Ch. 15
   c. Public Goods
      F: Ch. 16
   d. Externalities and Coase Theorem
      F: Ch. 17
   e. Local provision of public goods

3. Introduction to Game Theory
   a. Games of Complete Information
      G: Ch. 1-2
      BH: Ch. 16
   b. Games of Incomplete Information
      G: Ch. 3