Course Syllabus

Course Description
This course will deepen your understanding of microeconomic theory and develop your skills in applying it to public policy and management issues. This course builds upon the individual choice theory developed in PBAF 516 and in how individual choice works in the context of markets. This course will focus on both the problems (and opportunities) that market-based exchange affords in allocating scarce resources in a variety of situations encountered in real world policy analysis and management -- situations in which decision makers needs to consider the time profile of costs and benefits, ownership rights may not be complete, information is imperfect, or outcomes are uncertain.

Pre-requisites
Successful completion of PbAf 516 or a passing grade on the 516 waiver exam administered before Fall term.

Office hours:
Tuesdays 1-3pm and Wednesdays 5-6pm, and others by appointment (just email me).

Problem Sets
I will distribute four problem sets throughout the term. It is almost impossible to learn microeconomics well without working problems. Working in groups is recommended. The TA’s review sessions will be partly devoted to going over the problems. The problems are excellent preparation for the exams. Homework assignments will not be graded, and the answer key will be distributed approximately one week after the assignment is distributed.

Exams
There will be between 3 and 5 in-class “surprise” quizzes. There will not be a quiz on the first and last classes, and not on the day of the midterm. These quizzes will contain 2 questions, one relating to previous material (from anytime during the quarter) and one question on current material. You can choose to do either one or both questions and you will receive the higher grade from either question. Also, I will drop your lowest quiz grade. These quizzes will be graded such that an honest effort will receive a minimum of 3.0. These quizzes will be closed book and no notes. You may want to get in the habit of bringing a calculator to class, both for the quiz and to work through problems in class.

Absence policy on quizzes: I will not provide make-up quizzes. If you know you are going to miss class or are feeling unwell, please email me before the start of class to let me know. If this happens once, this would be the quiz score we drop. If it happens twice (both times with advanced notice), I will count the second missed quiz as a 2.0. If it happens more than twice (always with advanced notice), I reserve the right to ask for formal documentation of an approved absence (i.e. a doctor’s note). I have in mind unforeseen illness and emergencies, not things like meetings for work, job interviews, etc. If you email me after the start of class you will receive a zero for the quiz.

There will also be two exams, one in-class during the middle of the term and one during finals week. The exams will be closed book and closed notes. Any formulas needed will be provided on a sheet that I will provide during the exam. I will also let you know in advance what will be on that sheet. No other notes or materials can be used. I will provide calculators for you to use during the exam. No phone or internet capable devices may be used at any time during the exam. The final exam will be cumulative but weighted towards the material covered in the latter half of the term.

Grading

<table>
<thead>
<tr>
<th>In-class “surprise” quizzes</th>
<th>10%</th>
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<tbody>
<tr>
<td>In-class midterm exam</td>
<td>45%</td>
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<tr>
<td>Final exam</td>
<td>45%</td>
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Textbooks:

"Microeconomics" by Jeffrey M. Perloff, Addison-Wesley 6th edition (in bookstore)


Additional readings are available here.

I will use Canvas as a repository for homework assignments and keys, completed lecture notes and slides, old exams and current news articles that are related to the topics we are covering (feel free to email suggestions of articles to me). Please get (or stay) in the habit of checking Canvas regularly.

Course Objectives
By the end of the course, you should be able to:

Discounting
- Calculate the present value of a stream of payments
- Understand the implications of the discount rate r and constant exponential discounting
- Calculate prices with inflation and understand how this relates to discounting
- Identify difference between nominal and real interest rates
- Calculate present values with relative price changes

Welfare economics and benefit-cost logic
- Review ideas of indifference curves, utility maximization, opportunity costs.
- Describe Pareto efficiency and how trade can help achieve it.
- Describe the distinction between “equity” and “efficiency” in economic thought, and evaluate several candidate social welfare functions
- Review basic logic of government intervention and benefit-cost analysis

Public goods and open access resources
- Define the characteristics of public goods and open-access resources
- Calculate aggregate demand curves for non-rival goods, calculate optimal provision levels, and discuss optimal pricing
- Understand why free-riding and demand revelation can lead to under-provision of public goods

Externality
- Define an externality
- Show (diagrammatically and mathematically) the welfare effects of correcting the externality, either through regulation or introduction of a Pigouvian tax or subsidy
- Describe other approaches for “internalizing” externalities, including those based on property rights assignment and Coasian bargaining.

Benefit-cost analysis and nonmarket valuation
- What is benefit-cost analysis? What are the steps of BCA?
- Define the difference between a Pareto improvement and a potential Pareto improvement. Discuss whether this is a reasonable social decision-making rule.
- Describe three approaches for valuing impacts outside markets: travel cost, hedonic analysis, and contingent valuation.

Uncertainty
- Review expected value; define and calculate the value of information
- Define risk aversion and understand the difference between expected wealth and expected utility
- Calculate actuarially-fair insurance premiums and maximum WTP for insurance
- Describe strategies of risk-pooling and risk-spreading

Asymmetric information
- Describe both the moral hazard and adverse selection problems and discuss several examples
- Understand private and public responses to both problems

Principal-agent problems and contracting
- Describe several potential contractual forms and their pros and cons in dealing with asymmetric information in principal-agent problems
- Understand the ideas of the participation constraint (and fairness) and “residual profit” in contracting
- Apply by designing a contract
- Describe “stewardship theory” and discuss empirical evidence (Van Slyke articles)

Public choice
- Describe Tiebout sorting theory for local public goods and its application in public choice theory, fiscal consolidations, etc.
- Discuss criticisms of theory.
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<tr>
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<th>Event</th>
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<td>Mon Jan 18, 2016</td>
<td>Homework 1 (<a href="https://canvas.uw.edu/courses/1025226/assignments/3098982">link</a>)</td>
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<tr>
<td>Mon Feb 8, 2016</td>
<td>In-class midterm for afternoon section (<a href="https://canvas.uw.edu/calendar?event_id=859052&amp;include_contexts=course_1025226">link</a>)</td>
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