
Course description:
The benchmark model of economics is that markets are “good” at producing and allocating most commodities. However, there are instances when markets do not work well. This is termed market failure, and the course will discuss two classic examples of market failures, viz. public goods and externalities. In such situations, a government program may be justified on the grounds that it can improve outcomes. In addition, markets do not always lead to equitable outcomes. In such situations, a government program may be justified if it redistributes resources from rich to poor families. The course discusses how the design of a program is determined by the legislators’ objectives and by the extent to which voters are informed. In addition to discussing the justification and design of a government program, the course discusses the financing of the program and the design of the tax structure.

Pre-requisites:
Intermediate Microeconomics, ECON 3070;
Introduction to Statistics with Computer Applications, ECON 3818.

Course Assignments and CULearn:
All course assignments, problem sets and some lecture notes are posted on CULearn which may be accessed at culearn.colorado.edu through cuconnect.colorado.edu.

In the past, some students have had difficulty in downloading some of the posted pdf files. ITS advises that this is due to the large file sizes. ITS recommends that you open the Adobe Acrobat Reader. Then click as: Edit > Preferences> Internet and unchecked “Allow Fast Web View”.

Please note that six pages of each Adobe Acrobat file can be printed on a single sheet by clicking as: Print>Properties>Multipage>6
**Attendance at class:**

Woody Allen once remarked: "90% of life is just turning up". The best way to learn the material is to attend class. Reading the lecture notes posted on the web is not a good substitute for attendance. Attendance at class is expected and required.

**Problem Sets:**

Problem sets with answers will be posted for each topic. The problem sets are an integral part of the course. They are designed to help you use the material and a significant part of the exams will loosely follow their format.

In addition, there are many questions at the end of each chapter in the textbook. I encourage you to do these questions and I have posted the answers for your use.

**Grading:**

There will be a midterm exam, a paper and a final exam. The student’s grade (before any adjustment for non-attendance) will be determined as: 45% Midterm, 10% Paper and 45% Final.

Non-attendance at class will be reflected in your grade. Your final score - calculated as explained above under “Grading” - is out of 100 points. For each absence from class after your third absence, your score will be reduced by .5 point. For example, your score from the exams and paper is 76 (out of 100) and in total you missed 6 classes. Your final score which I will use to calculate your grade is 76-3(.5) = 74.5.

**Paper timeliness:**

It is important that the paper is handed in on the date due (to be announced). If the paper is not handed in by the date due, your course score will be lowered 5% . If the paper is not handed in by the day of the exam, *you will be graded Fail*. If you subsequently hand in the paper within 6 months of the final, your grade will be changed to the grade earned in the midterm, the final and the paper. If you do not subsequently hand in the paper within 6 months of the final, your grade will remain permanently as Fail.

**Contributing to the group in the creation of the paper:**

There have been instances in the past when a member of a group does not fully participate in the creation of the paper. If this happens, the members of the group who are participating should email me noting that the member of the group is not fully participating in the creation of the paper. I will then forward this email to the member asking for his/her comment. If he/she agrees that he/she is not fully participating, I will increase the scores of the participating members to reflect the fact that they are doing more work and reduce the score of the other member to
reflect the level of his/her participation. If he/she disagrees and claims to be participating, I will summon all group members to my office to discuss.

Administrative Drop:
Because attendance is important and is expected, I will drop from the class any student who neither attends one the first three classes of the term nor gets special permission from me for his/her absence.

Exams:
Because this is an advanced course, there is only one midterm. The midterm and final will be given as:

MIDTERM: Monday 10 October 7:00 p.m. - 9:00 pm.
in HALE 270

FINAL: Tuesday 13 December 7:30 p.m. - 10:00 p.m.
in ECON 117

You must bring a blue-book to each exam.

Because this is a 4000-level class, the exams will not just repeat material covered in class. Some questions will closely follow the material covered in class and in the problem sets, but some will ask you to apply the material in a different environment.

Failure to be present at an exam:
If you fail to be present at an exam (unless you are ill and have a medical note from your doctor or unless, before the exam, I have granted you permission to take a make-up exam), you will score 0 in the exam.

Classroom courtesy:
Please turn your cell ‘phone off prior to the start of class.

I believe that learning is enhanced if there is full concentration by both the instructor and the student. Therefore, usage of laptop computers in class is restricted to following the course notes. To facilitate this, laptops may only be used in the front two rows of the classroom.

Students with Special Needs:
If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs may be addressed. Disability Services determines accommodations based on documented
disabilities. Contact: 303-492-8671; Center for Community Building, Room N200; or http://www.colorado.edu/disabilityservices.

If you have a temporary medical condition or injury, please see the guidelines at: www.colorado.edu/disabilityservices/go.cgi?select=temporary.html

Disability Services’ letters for students with disabilities indicate legally mandated reasonable accommodations. Answers to Frequently Asked Questions can be found at: http://ww.colorado.edu/disabilityservices.

**Harassment Policy:**
The University of Colorado at Boulder policy on Discrimination and Harassment, the University of Colorado policy on Sexual Harassment and the University of Colorado policy on Amorous Relationships applies to all students, staff and faculty. Any student, staff or faculty member who believes s/he has been the subject of sexual harassment or discrimination or harassment based on race, color, national origin, sex, age, disability, creed, religion, sexual orientation, or veteran status should contact the Office of Discrimination and Harassment (ODH) at (303) 492-2127 or the Office of Student Contact (OSC) at 303-492-5550. Information about the ODH, the above referenced policies and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at: http://www.colorado.edu/odh

**Religious Observances:**
Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, please let me know in a timely manner if one of the exam dates falls on a religious holiday you intend to observe and I will arrange for you to take a make-up. See policy details at: http://www.colorado.edu/policies/fac_relig.html

**Classroom Behavior:**
Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at http://www.colorado.edu/policies/classbehavior.html and at
Academic Integrity:

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at:

http://www.colorado.edu/policies/honor.html and at
http://www.colorado.edu/academics/honorcode/
# PROVISIONAL COURSE OUTLINE

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<tr>
<th>Date</th>
<th>Topic</th>
<th>Chapter</th>
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<td><strong>1. INTRODUCTION</strong></td>
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<tr>
<td>22 Aug</td>
<td>INTRODUCTION</td>
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<tr>
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<td>The Four Questions of Public Finance</td>
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<td>Separation of expenditure and taxes</td>
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<td>Government size.</td>
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<td>Normative v. positive</td>
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<td>24 Aug</td>
<td>FISCAL FEDERALISM</td>
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<td>Assignment of responsibilities</td>
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<td>Problem Set: Fiscal Federalism</td>
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<td>26 Aug</td>
<td>POSITIVE ECONOMICS</td>
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<td>The need for a model</td>
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<td>NORMATIVE ECONOMICS: THE OBJECTIVE</td>
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<td>Pareto-efficiency</td>
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<td>Welfare functions</td>
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<td>Need for a model</td>
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<td><strong>2. BASE CASE: COMPETITIVE MARKETS</strong></td>
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<td>31 Aug</td>
<td>PRIVATE GOODS</td>
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<td>2, 7 Sept</td>
<td>Competitive outcome.</td>
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<td></td>
<td>First fundamental welfare theorem.</td>
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<td></td>
<td>Second fundamental welfare theorem.</td>
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<td>Problem Set: First Fundamental Welfare Theorem</td>
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<td>Problem Set: Public Provision of Private Goods</td>
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<td>Problem Set: Second Fundamental Welfare Theorem</td>
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<td><strong>3. MARKET FAILURE: PUBLIC GOODS</strong></td>
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<td>9,12,14,16,19,21 Sept</td>
<td>PUBLIC GOODS</td>
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<td>Non-rivalness and non-excludability.</td>
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<td>Efficient provision.</td>
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<td>Free-rider problem.</td>
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<td>Public vs. private provision.</td>
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Problem Set: Why the lights don’t get turned off after class.
Problem Set: Non-excludable public good.
Problem Set: Excludable public good.

4. GOVERNMENT FAILURE: PUBLIC DECISION-MAKING

23, 26, 28, 30 Sept
PUBLIC DECISION-MAKING

3, 5 Oct
Normative: Benefit-cost analysis
Positive:
Informed voters:
- majority voting - median voter theorem.
- cycling.
- Arrow impossibility theorem.

Problem Set: Benefit-Cost Analysis.
Problem Set: Voting
Problem Set: Cycling.

7 Oct
Review

10 Oct
MIDTERM (7:00 - 9:00 p.m. in HALE 270)

12 Oct
PUBLIC DECISION-MAKING (cont)
Uninformed voters:
- the iron triangle.

5. MARKET FAILURE: EXTERNALITIES

14,17,19,21,24,26 Oct
EXTERNALITIES
Efficient behavior.
Coase theorem.
Pigou taxes and subsidies.
Regulation.

Problem Set: the Coase theorem.
Problem Set: Pigou tax.
Problem Set: Permit sales.
Problem Set: Regulation
4. INCOME REDISTRIBUTION

28, 31 Oct INCOME REDISTRIBUTION 12, 13
2, 4, 7 Nov Process or end-state criterion.
Equity and social welfare functions.
Utilitarianism.
Max-min and the original position.
The shrinking pie.
The equity v. efficiency trade-off.
Public provision of private goods.

Problem Set: Social welfare and income redistribution.

5. TAX ANALYSIS

9, 11, 14 Nov PUBLIC FINANCE: TAX OR DEFICIT FINANCING 20
Ricardo equivalence.
Keynes view.
Overlapping-generation model.
Traditional argument.
Crowding-out of capital.
Social Security 11

Problem Set: Tax or deficit financing.
Problem Set: Social security and savings.
Problem Set: Demographic issues

16, 18, 28, 30 Nov TAXATION: PRODUCT AND INCOME TAXES 15
Do sales taxes reduce consumption
Do labor taxes reduce effort?
Do capital taxes reduce savings?
Excess Burdens

Problem Set: Setting the product tax rate.
Problem Set: Product tax: excess burden.
Problem Set: Setting the income tax rate.
Problem Set: Income tax - excess burden.

2, 5, 7 Dec TAXATION: NORMATIVE RULES FOR SETTING TAX RATES 16
Tax rules

Problem Set: Tax Reform
9 Dec  Review

13 Dec  FINAL EXAM (7:30 p.m. - 10:00 p.m. in ECON 117)