# PUBLIC ECONOMICS: ECONOMICS OF THE GOVERNMENT SECTOR (ECON 4211) Department of Economics, University of Colorado Fall 2019

Classtime: M,W,F: 12 - 12:50 pm. Lecture Room: DUAN G2B47

Professor: Charles de Bartolome Office: ECON 203

Office hours: Mon 1:50 - 2:50 pm; Tu 1:30 - 2:30 pm; e-mail: debartol@colorado.edu

Fri 1:50 - 2:50 pm.

Textbook: Harvey S. Rosen and Ted Gayer: Public Finance (10<sup>th</sup> edition). McGraw-Hill Irwin.

Clickers The class uses i>clickers. If you do not already own one, an i>clicker may be

purchased at the University of Colorado bookstore.

Clickers must be registered at: https://myCUinfo.colorado.edu.

Register using your Identity Login not your student ID.

# *Pre-requisites:*

Intermediate Microeconomics, ECON 3070;

Introduction to Statistics with Computer Applications, ECON 3818.

# 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 in which use of markets would lead to an inefficient outcome, 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.

## Course Assignments and Canvas:

All course assignments, problem sets and some lecture notes are posted on Canvas at <a href="http://canvas.colorado.edu">http://canvas.colorado.edu</a>

Please note that four pages of each Adobe Acrobat file can be printed on a single sheet by clicking as: Print > Landscape > Multiple > Custom 2 by 2.

## Attendance at class:

Woody Allen once remarked: "90% of success 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.

## Administrative Drop:

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

# *Use of clickers:*

Clickers will be used near the end of most classes to reinforce the main point of the lecture.

I consider it fraud if a student uses another student's clicker.

You get a green light when your answer is registered. If you get a red light, your clicker is not registering and your score is automatically zero.

## Problem Sets:

Problem sets with answers are listed under each topic on the syllabus. 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.

Although the answers to the problem sets are posted, I encourage you to make a real effort to solve the problem before you check the answer.

## Paper and contributing to the team in its creation of the paper:

The paper is designed for you to apply the course's material to a topic of interest to you. It will be done as a team of three students.

There have been a few instances in the past when a member of a group does not fully participate in the creation of the paper. If this starts to happen, the members of the group who are participating should *immediately* email me noting that the member of the group is not fully participating in the creation of the paper. I will then summon all group members to my office to discuss. If he/she agrees that he/she is not fully participating, I will give her/him a chance to re-engage with the group and do his/her share. If there is no change in behavior, 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 non-participating member.

## Exams:

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

MIDTERM: Monday 7 Oct 7:00 - 9:00 pm.

in: TBA

FINAL: Saturday 14 Dec 4:30 - 7:00 pm.

in DUAN G2B47

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 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 are unable to take an exam because of illness: You must get a medical note from a doctor to confirm your inability to take the exam *and* advise me of your inability *before* the exam. In this case you may take a make-up. Otherwise, unless you have obtained my prior permission to take the make-up, failure to be present for an exam will cause your score to be 0 for that exam.

## Grading:

There will be a midterm exam, a paper and a final exam. The student's grade will be determined as:

41% Midterm,

10% Paper

41% Final

8%. In-class clicker questions

Concerning in-class clicker questions. Each correct answer will receive 1 point, and an absence or an incorrect answer will receive zero points. In calculating your total score for all in-class clicker questions, I will sum your scores for all days, omitting your three lowest daily scores.

Concerning the paper. 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 maximum score for the paper will be lowered from 10 to 5 points. If the paper is not handed in by the day of the exam, your score for the paper will be 0.

## 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. To facilitate this, laptops may only be used in the front two rows of the classroom and usage of laptops in class is restricted to following the course notes.

# Accommodations for Disabilities:

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to me in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the <u>Disability Services website</u>. Contact Disability Services at 303-492-8671 or <u>dsinfo@colorado.edu</u> for further assistance. If you have a temporary medical condition or injury, see <u>Temporary Medical Conditions</u> under the Students tab on the Disability Services website.

## Religious Observance:

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly 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 the <u>campus policy regarding religious observances</u> for full details.

## Classroom Behavior:

Students and faculty each have responsibility for maintaining an appropriate

learning environment. Those 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 race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. 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. For more information, see the policies on classroom behavior and the Student Code of Conduct.

#### Honor Code:

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (<a href="honor@colorado.edu">honor@colorado.edu</a>); 303-492-5550). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic integrity policy can be found at the Honor Code Office website.

## Sexual Misconduct. Discrimination. Harassment and/or Related Retaliation:

The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct intimate partner abuse (including dating or domestic violence), stalking, protected-class discrimination or harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or <a href="mailto:cureport@colorado.edu">cureport@colorado.edu</a>. Information about the OIEC, university policies, anonymous reporting, and the campus resources can be found on the <a href="mailto:OIEC">OIEC</a> website.

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

## Course outline:

A list of topics to be covered and likely dates is shown on the next pages. This is an estimated plan. Topics may take more or less time than estimated in this plan.

# COURSE OUTLINE

<u>Date</u>	<u>Topic</u>	<u>Chapter</u>
	1. INTRODUCTION	
26 Aug	INTRODUCTION Fundamental Question of Public Economics Micro v. Macro Separation of expenditure and taxes	1
28 Aug	Government size	
	FISCAL FEDERALISM Assignment of responsibilities	22 (pp. 498-510)
	Problem Set: Fiscal Federalism	
30 Aug	Normative <i>v.</i> positive	
	POSITIVE ECONOMICS The need for a model	2
4 Sept	NORMATIVE ECONOMICS: THE OBJECTIVE Pareto-efficiency Welfare functions Need for a model	3
	2. BASE CASE: COMPETITIVE MARKETS	
6, 9, 11, 13 Sept	PRIVATE GOODS Competitive outcome. First fundamental welfare theorem. Second fundamental welfare theorem.	3 (cont)
	Problem Set: First Fundamental Welfare Theorem Problem Set: Public Provision of Private Goods Problem Set: Second Fundamental Welfare Theorem	m

## 3. MARKET FAILURE: PUBLIC GOODS

16,18, 20,23,25 Sept PUBLIC GOODS

4 (omit Appendix)

Non-rivalness and non-excludability.

Efficient provision. Free-rider problem.

Paying for excludable public goods

Public vs. private provision.

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

27,30 Sept; 2,4 Oct PUBLIC DECISION-MAKING

Normative: Benefit-cost analysis 6 (pp. 108-110, Positive: Informed voters: 113-115)

- majority voting - median voter theorem.

- logrolling

Problem Set: Benefit-Cost Analysis.

Problem Set: Voting

7 Oct REVIEW

MIDTERM (7:00 - 9:00 p.m. in

9,11,14,16 Oct PUBLIC DECISION-MAKING (Cont.) Informed voters:

6 (pp. 110-113, 116-126)

- cycling.

Other methods of making public decisions

Arrow impossibility theorem.

Uninformed voters - the iron triangle

Problem Set: Cycling.

Problem Set: More than two alternatives

## 5. MARKET FAILURE: EXTERNALITIES

18, 21, 23, 25, 28, EXTER

**EXTERNALITIES** 

5

30 Oct; 1 Nov Efficient behavior. Coase theorem.

Pigou taxes and subsidies.

Regulation.

Problem Set: Coase theorem. Problem Set: Pigou tax. Problem Set: Permit sales. Problem Set: Regulation

# 6. INCOME REDISTRIBUTION

4,6,8,11,13,15 Nov

INCOME REDISTRIBUTION

12 (pp. 251-263) 13 (pp. 270-282)

Process or end-state criterion.

Equity and social welfare functions.

Utilitarianism.

Max-min and the original position.

Means-testing: typical redistribution program

Okun's bucket: The shrinking pie. The equity *v*. efficiency trade-off. Public provision of private goods.

Problem Set: Okun's Bucket: Redistribution Program Problem Set: Social welfare and income redistribution.

#### 7. TAX ANALYSIS

18,20,22 Nov; 2 Dec PUBLIC FINANCE: TAX OR DEFICIT FINANCING

20 (omit p 461)

Ricardo equivalence.

Keynes view.

Overlapping-generation model.

Traditional argument. Crowding-out of capital.

Social Security

11

Problem Set: Tax or deficit financing.
Problem Set: Bonds crowd out capital
Problem Set: Social security and savings.
Problem Set: Demographic issues

4,6,9 Dec 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.

Problem Set: Okun's bucket: cost of redistributing income

11 Dec REVIEW

14 Dec FINAL EXAM (4:30 - 7.00 p.m. in DUAN G2B47)