

Syllabus – Public Goods (ECON 511)

Spring 2021
Asynchronous

Instructor: Benjamin M. Marx, Dept. of Economics

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Office hours by appointment.

Course Websites

Compass 2g: <https://compass2g.illinois.edu/webapps/login/>

Box.com: Students will receive an emailed invitation to the folder into which I will put lecture videos and other materials for the class. If you sync this folder to your computer, you will not have to download each file.

Zoom: The class will be asynchronous, but if we meet synchronously, we will use this room.

<https://illinois.zoom.us/j/2580384452?pwd=RSStQL2lPWk1dDIHQyswZDBhQ3FaUT09>

Password: 070448

Google sheet: For various activities,

https://docs.google.com/spreadsheets/d/1yNcn7907h8u8OCe_ZhXQ1sXXmIXCb_JFZC14ZLBbZc/edit#gid=0

Course Description: This course examines the issue of public goods using a variety of tools from microeconomics. It starts from the theory of public goods and tests of this theory using laboratory experiments. It proceeds to examine government and philanthropic tools for addressing the public goods problem. We then study major government expenditures, including the most important social insurance programs. In this course we will examine the costs and benefits of these programs and the implications for optimal policy design. After using economic theory to lay the groundwork to guide this analysis we will review cutting-edge empirical research on the relevant parameters of real-world policies. Students will practice solving theoretical models, designing experiments, critically evaluating policy and research, performing statistical analysis, and communicating the methods and results of academic research.

Prerequisites: This course is intended for 2nd- and 3rd-semester students in the Economics Department's MSPE program, and it assumes a background in microeconomics and econometrics at the graduate level.

Objectives: The first objective is to provide a critical overview of the literature on public goods, helping students think about potential solutions and concerns for policy design. The second objective is to prepare students to perform statistical analysis and to evaluate research by gaining familiarity with applied microeconomics methodologies.

Textbook: There is no required textbook, but students interested in a book that covers many of our topics may wish to consult Jonathan Gruber's Public Finance and Public Policy. The textbook has an associated website with resources for students.

Requirements (with % of Grade):

1. (30%) Homework assignments. There will be approximately one assignment per week. These may be very different from week to week and may require the student to solve math problems, use R (<https://ftp.ussg.iu.edu/CRAN/banner.shtml>), record a video with Zoom, or use other tools. Each will contain full instructions.
2. (20%) Research project. Each student will contact a charitable or government organization to request anonymized data. Using the data from this research partner, the student will perform and present a descriptive analysis, perform and present a multivariate analysis, and propose an experiment that the research partner could run. Instructions are provided in a separate document.
3. (15%) Literature review (5 pages max, double-spaced). The student should provide a review of the literature on a particular public good or issue related to a public good. Ideally, this will be related to the research project so that it can be shared with the research partner. The review should cover all of the

most relevant research, describe the methods and quality of this research in a clear way, and be organized so to show how the papers relate to each other. The best reviews will also attempt to identify a gap in the literature or question that has not been addressed, discuss how one might answer an outstanding question, or present a theoretical idea or proposal for experimental or empirical research. Each student must post a topic in the Google sheet and obtain approval from me by *one week after the midterm*.

4. (15%) Final exam

5. (10%) Midterm exam

6. (10%) Participation (including comments on classmates' presentations)

Submitting assignments: All assignments should through the appropriate assignment content item on Compass. The due date will be provided with the instructions for each assignment.

Special Needs: Contact me by the 2nd class if you will require accommodation for special learning needs. To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TTY), or e-mail a message to disability@uiuc.edu.

(Not relevant this semester) Campus Security: Campus general emergency response recommendations can be found at <http://police.illinois.edu/emergency/response/procedures/>. The floor plan for David Kinley Hall is available at <http://police.illinois.edu/emergencyplanning/floorplans/>.

Support Services for Students:

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- [Disability Resources & Educational Services](#)
- [McKinley Mental Health Services](#)
- National Suicide Prevention Hotline: 800-273-8255

Course Outline (roughly 1 week each)

	Content	Tools
1	Public goods theory	Theory
2	Public goods experiments	Lab experiments
3	Charity	Dictator games, norm elicitation
4	Market efficiency/failure and the role of government	Descriptive statistics, regression
5	Externalities	Difference-in-differences
6	Crowd-out	Instrumental variables
7	Pigouvian taxation and regulation	Decompositions
	Midterm	
8	Insurance issues: adverse selection, moral hazard	Censored regression
9	Disability Programs	Triple differences
10	Unemployment Insurance	Regression discontinuity & kink
11	Healthcare	Field experiments
12	Social Security	Bunching estimation
13	Education	Value-added measurement
14	Transfer programs	Randomization inference

Final Exam: 8:00-11:00am on Monday, May 10, in the Zoom room linked above