COURSE DESCRIPTION

Public finance is the study of the economic functions or role of a government and its associated institutions. The purpose of this course is to provide a survey of part of this field with an emphasis on its microeconomic aspects. (The macroeconomic aspects can be found in graduate level macro courses.) Therefore, knowledge of graduate level microeconomic theory and the ability to understand canonical micro arguments will be assumed.

The field is divided into three parts: theory, institutions, and empiricism. Since the theoretical portion of the field seems to be the most difficult to understand, this course (543) will attempt to cover just part of the theory. The focus of this course is on the theory of first best, while the other theory course, 544, covers the theory of second best. Theoretical public finance provides a foundation for studying the institutional and empirical ideas in the area, covered in 547. The three courses comprising the public finance field (543, 544, and 547) can be taken in any order. However, students are encouraged to take one of the theory courses (543 or 544) prior to taking 547, if possible. Turmoil and confusion found throughout the field are explained by the lack of a comprehensive theoretical structure. In order to give some semblance of order to the field, we study it from a general equilibrium perspective.

It should be noted that, in contrast with the way this subject is taught elsewhere, we do not divide the field between taxation and expenditure. Such a division would make general equilibrium analysis impossible.

RELATED COURSES

Economics 544, 545, and 547 have content important to public finance. Those students interested in writing a dissertation in public finance should consider taking Political Science 4021, 5041, 505, 507, 5071, and/or 5263. The ideas covered in these courses will be useful to public finance in the near and immediate future. Please see the appropriate instructor in the Political Science Department before registering for these courses.

COURSE REQUIREMENTS

By the end of the course, you are expected to have an idea of the methods currently used by public finance economists, as well as a picture of the state of the field. To this end, there will be one homework set during the course. Students can solve the problems at their own pace. More importantly, this structure allows for problems that are integrative of several parts of the course. A closed book final examination will represent 80% of the grade, while the homework will account for the remainder. The final exam is TBA; I am happy if the students decide when they want it.
OFFICE HOURS

My office is located at 387 Seigle. My e-mail address is berliant@wustl.edu, and my phone is 935-8486. I am happy to answer questions via e-mail.

Office hours are Tuesdays 3 - 4 PM when there is a theory workshop, Wednesdays 1 - 2 PM, and by appointment.

READINGS

The homework and exam will be based primarily on the lectures. These readings are provided for background, in case I am unclear in class, in the unlikely event you are absent from a class, or for further information on a topic. You should at least skim them so you know their content as they are frequently cited in the literature. Most (but not all) of the books are on reserve in the library. Most (but not all) of the papers are compiled in a reader that will be available for purchase (at cost) in the Economics Department office.

Double starred readings are articles that are of immediate importance and are frequently cited in current literature. The starred readings are more important and are generally classics (except for the textbook chapters). Unstarred readings are provided for further information on a topic. Notice that for some readings, I list working papers rather than published papers. That is because it is often the case that journals have authors cut down papers to the point where they are more difficult than necessary. If the working papers are easier to understand, we use them.

The textbook abbreviations are:


Their advantages and disadvantages will be discussed at the first class meeting. The textbook chapters listed under a topic are in order of quality.

Another useful text is Myles, Public Economics (Cambridge University Press, 1995).

It provides a more contemporary treatment than the others, but I find its discussion of the theory of the first best less interesting than its treatment of the theory of the second best. The structure of the book is also quite different from the structure of this course. So this text is more appropriate for 544.

Note: In the past, students have suggested that someone type up the course notes and post them on the course web site. This is a good and interesting
suggestion as a substitute for a text. I experimented with it in 503. There are two issues, one major and the other minor. The major issue is that, in spite of our best efforts, there were errors in the notes. Even worse, they made their way into students’ exam answers. Big mess. The minor issue is that students often ask questions in class, leading to digressions or discussions of material I didn’t intend to cover. Thus, the notes are generally incomplete. If this material appears on an exam or homework, there are complaints.
COURSE STRUCTURE

The diagram below describes a framework for sections I — IV, focusing on first best analysis. Varieties of externalities (to be defined in class) are written across the top of the diagram whereas research objectives are written on the side. Each box corresponds to the given research objective for the given externality type, and is filled with appropriate literature from the reading list.

<table>
<thead>
<tr>
<th>Research Objective</th>
<th>Private Goods</th>
<th>Pure Public Goods</th>
<th>Externalities</th>
<th>Local Public Goods</th>
</tr>
</thead>
</table>
I. Introduction, Private Goods, and Tool Kit

* A/S Chapter 11

* T Chapter 1

* S Part I


* Thomson, W. (1999), “Economies with Public Goods: An Elementary Geometric Exposition,” *Journal of Public Economic Theory,* vol. 1 no. 1 January, pp. 139-176. **This is a beautiful paper that will be useful in Sections II and IV as well.**

II. Pure Public Goods

* L Chapter 2

* A/S Chapter 16

* T pages 170-192


** Conley, J. (1994), “Convergence Theorems on the Core of a Public Goods Economy: Sufficient Conditions,” *JET,* 62, 161-185. (John Conley was a student of mine, and this was part of his dissertation. He once sat where you are sitting.)
III. Externalities

* L Chapters 1, 3.
* T pages 193-203.

IV. Local Public Goods


* A/S Chapter 17


*** To find lots of up-to-date literature in this area, please look on econlit for my students: John Conley, Hideo Konishi, and Tom Nechyba, and for my grandstudent Pat Bayer.

V. The Free Rider Problem and Incentives

* L Chapter 5


