90-736 Public Finance

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The purpose of this course is to provide an introduction to the theory and practice of how government finances itself from both positive and normative points of view. To accomplish this, the course reviews: i] rationales for government intervention in the market place, ii] analyzes methods of resolving conflicts over the size of the public sector budget, iii] extensively analyzes the rationales and issues of various sources of public revenue, and iv] reviews the effects of public sector spending and taxes on the aggregate economy. While the examples are largely drawn from the United States, examples are also drawn from other industrial democracies and non-democracies, and attention is devoted to the interaction between normative design and political processes to accomplish legislative change. The course draws on Professor Strauss' considerable federal, state, and local experience in governmental finance. See his personal web page, www.andrew.cmu.edu/user/rs9f

Because the subject matter of public spending and revenues can easily consume an entire academic year of study, *Public Finance* focuses mainly on the revenue side of the public budget. Two courses typically offered by Professor Strauss in the Spring build on *Public Finance*. *Public Expenditure Analysis* (90-774) deals with techniques for evaluating private and public expenditure and capital spending decisions. *Education Finance and Policy* (90-817) deals in-depth with issues surrounding multi-level government finance from US and international perspectives. *Education Finance and Policy* presumes the material covered in *Public Finance*; students interested in taking *Education Finance and Policy* should take *Public Finance*. It is suggested that students interested in *Public Expenditure Analysis* also take *Public Finance*.

Students in *Public Finance* are expected to read and annotate my lecture outlines, read the required reading materials, and *bring them to class* each session. Students are also expected to own and know how to operate an electronic calculator (other than those contained in a cell phone ¹) that is capable of doing $x^{a/b}$. Please be sure you bring such a calculator with you to class each session, and bring your Strauss Bucks ² to each session as well.

In addition, it is strongly recommended that you subscribe to *The Wall Street Journal* in order to keep abreast of economic, financial and fiscal events, especially in this election year. The *Wall Street Journal* is also available through the CMU library portal.

The course textbook is the 5th edition of Musgrave and Musgrave, *Public Finance in Theory and Practice*. McGraw Hill. Problem sets may be accomplished through the use of SAS, Stata, or R. Tutorials on how to use SAS will be provided.

The format of the course is lecture/discussion and is conducted in standard American English. Students are encouraged to ask questions by raising his/her hand to be recognized by me, and then, if so recognized, will be invited to ask their question or make a comment. Students who ask that the obvious be explained or simply make speeches and filibuster will not be recognized for comment.

We will be using Canvas for a variety of purposes. The up to date syllabus is always under the Syllabus Module, the lecture outlines and required and optional readings (other than from the textbook per se) are available by numbered *Session*; problem sets and associated data are under *Assignments*. There is a great deal of essentially optional/additional material within each *Session*.

Evaluation of student performance is based on written essay examinations that I personally grade, problem sets graded by the TA and perhaps a grader, class participation. Identification of each student on problem sets and examinations is solely through the last 4 digits of his/her Social Security Number or id used; you will be asked to provide this the first day of class in August, and were already asked to provide this in

Thanks to Christine Alagara at Moody's for pointing this out one day in class several years ago.

See http://www.andrew.cmu.edu/user/rs9f/pf04.html for a photo of them.

conjunction with the student background questionnaire.4

Answers to each of the problem sets <u>must be typed or word-processed</u>, and must contain written, verbal explanations of all numerical results. Problem sets 2-7 are to be turned in paper form. Handwritten answers to problem sets will NOT be accepted. Problem sets 2, 3, 5, and 6 are to be worked on and answered separately and independently by each student.

Problem Sets 1, 4, and 7 may be completed in groups not to exceed 5 students/group.

The penalty for disobeying the rules prohibiting collaboration (which is construed as cheating) will at a minimum entail a failing grade on the problem set, and may include a recommendation to the Dean that you be expelled from the School of Public Policy and Management of the Heinz College. If there is evidence of copying from each other or copying from an answer key, you will be determined to have cheated.

Final points for each student are calculated using the above weights. A student may drop the lower score of one of the two midterm exams, and drop the lowest score of any problem set.

The grading scale, stated in Final Points, is:

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A 95-100 A- 90-94.9 B+ 85.0-89.9 B 80.0-84.9 B- 75.0-79.9 C+ 70.0-74.9 C 65.0-69.9 C- 60.0-64.9 D+ 55.0-59.9 D- 50-54.9 R < 49.9 Pass/Fail 70 or better
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	Problem Set Topic	Estimated Time		
Prob 1	SimCity 2000: Understanding the Governmental Budget Constraint NOTE : SimCity 2000 is now available only by purchase for under \$5.00.	E		
Prob 2	Reading and Interpreting the Internal Revenue Code	5-10 hours		
Prob 3	Sacrifice Theory, Excess Burden and Efficient Taxes 5-10 hours			
Prob 4	Individual Taxation with SAS (Group Problem Set)	15-25 hours		
Prob 5	Business Depreciation Policy, Warp Depreciation 5-10 hours			
Prob 6	Property Taxation: Equity and Appraisal Analysis of Residential Properties	7-15 hours		
Prob 7	Macro-Public Finance: Stabilizing the US Economy with Fair Model (Group Problem Set)	10-20 hours		

This means you are **NOT** to put your name on any problem set answer or examination answer booklet. Any problem set or exam that is personally identifiable will not be graded and the student will receive a zero score.

Lecture	Topic	Lecture	Topic
	Overview of Course and Key Concepts	13	Gift and Estate Taxation
1	The Public Sector: Functions and Institutions	14	Property Tax I
2	Public Goods	15	Property Taxation II
	SAS Tutorial 1	16	Social Insurance and the Payroll Tax
3	Public Choice: Mechanisms and Dilemmas	17	Other Transfer Programs
4	Introduction to Taxation: Equity and Efficiency	18	Fiscal Federalism: Revenue Sharing Formula Design
	SAS Tutorial 2	19	Fiscal Federalism: Revenue Sharing Civil Rights
5	Tax Incidence and Excess Burden I		Fair Model Tutorial in Classroom
6	Tax Incidence and Excess Burden II		Review
7	Taxation of Individual Income I		2nd EXAM: 10 ESSAY QUESTIONS (20%) 1.5 HOURS
8	Taxation of Individual Income II	20	Tax Administration and Simplification
9	Sales and Gross Receipts Taxation I	21	Stabilization Policy I
	Review		No Class: Thanksgiving Break
	1st EXAM: 10 ESSAY QUESTIONS (20%) 1.5 HOURS	22	Stabilization Policy II
10	Business Taxation I: Rationale, Classical System	23	Stabilization Policy III, IV
11	Business Taxation II: Current Federal and State Issues		Review
12	Foreign Tax Issues		FINAL EXAM 15 ESSAY QUESTIONS (30%) 3 HOURS