Public Finance

90-736

Syllabus

©Professor Robert P. Strauss

School of Public Policy and Management Heinz College

Carnegie-Mellon University

Fall 2024

MWF: 3:30-4:50PM

HH 2011

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<u>Revised August 21, 20</u>24

Mon-Wed-Fr: 3::30 4:50 PM Hamburg Hall 2011

Office Hours: 2:00-3:15 PM MWF and by appointment

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.¹ To accomplish this, the course reviews rationales for government intervention in the marketplace, analyzes methods of resolving conflicts² over the size of the public sector's budget, extensively analyzes the rationales and issues of various sources of public revenue, and reviews the effects of public sector spending and taxes on the aggregate economy. While the examples are largely drawn from the United States, examples will be used from other industrial democracies and non-democracies. The positive and normative frameworks in public finance, coupled with many examples, help organize one's thinking about the modern public sector and its interactions with the private and non-profit sectors.

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*; *Cost-Benefit Analysis: A Capital Budgeting Approach* (90-749) 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 with a focus on education finance from U.S. and international perspectives. *Education Finance and Policy* should take *Public Finance*. It is suggested that students interested in *Cost-Benefit Analysis: A Capital Budgeting Approach* also take *Public Finance*. Students who do this get good jobs in the public, private, and non-profit sectors³.

The course stores most things on Canvas under named Modules []. The following items will be used in the course:

- Free access to the Financial Times of London, <u>http://ft.com/cmu</u>⁴
- The textbook: Musgrave and Musgrave, Public Finance in Theory and Practice 5th Edition stored on Canvas
- The Little SAS Book: A Primer stored on Canvas
- The lecture notes, required and optional readings on Canvas along with power points.
- A calculator that is capable of doing x^{a/b} which can be found for free on the web for most Apple and Android cell phones
- A laptop with MS Excel or a spreadsheet program that can read/write from/to Excel and capable of wifi and ethernet

¹ Wikipedia states: "In economics, positive analysis is an attempt to understand the world without value judgments, while normative analysis uses value judgments. Positive statements are descriptive and factual, and they describe the world as it is. Normative statements are prescriptive and express value judgments, and they describe the world as it should be. Positive statements can be tested and verified, while normative statements are based on judgments that are either good or bad"

² Please look over <u>https://www.andrew.cmu.edu/user/rs9f/overview_6_25_2021.pdf</u> which explains how conflict is resolved in a democracy.

³ Students taking at least one of my three courses have secured jobs at: Deloitte-Touche, Grant Street Associates, Federated Investors, the American Enterprise Institute (2), Bloomberg (Hong Kong), Google(Hong Kong), Pennsylvania's Local Management Fellowship among others. Some have gone on to doctoral programs in economics at Tepper, Michigan State University; political science at the University of Rochester, and environmental policy at EPP. Also, my former students have also demonstrated strong career trajectories. Dan Hassell was until his retirement Pennsylvania's Secretary of Revenue; John Raymond was until his retirement Pennsylvania's Deputy Secretary of the Budget; Natalie Krug is Director of Pa. Governor's Shapiro's Office of Policy; Shawn Buckner, formerly Director of Policy and Planning for the US Department of the Interior is now an Officer of the Board of Governors of the Federal Reserve Board, and Director of the newly established Strategic Planning Group for the Board's Office of Statistics and Policy; Roger Severino, former Director of HSS' Office of Civil Rights is currently Assistant Director for Domestic Policy at the Heritage Foundaton; Chris Berdnik is Chief Financial Officer of the Pennsylvania Senate Appropriations Committee (R). Doctoral students of mine have gone on to academic careers at Duke, Texas A&M, University of Illinois-Springfield, University of Virginia, University of Georgia, as well as public service careers at the US Bureau of Labor. Praxtixa Desai just accepted the offer from California Governor Newsom to the position of Director of Housing Finance.

⁴ I strongly recommend reading the front page of *FT* each morning to become aware of national and international events.

access to the CMU internet environment (Andrew.cmu.edu)⁵

- 10 Strauss Bucks which you should print out and cut out with a scissors and are stored on Canvas
- An external USB drive of at least several gigabytes on which you can store data and results for problem sets

Periodically students ask me if there is a more basic public finance text that they can read in conjunction with Musgrave and Musgrave. Harvey Rosen's *Public Finance* is an easy read that is more current that you may find helpful. In addition, it is strongly recommended that you read the front page of *The Wall Street Journal or Financial Times* in order to keep abreast of economic, financial and fiscal events, subscribe to the free news feeds of Bloomberg and the Wall Street Journal's *Real Time Economics*. The *Wall Street Journal* is available through the CMU library portal. Also, thanks to the largesse of Hunt Library, by taking this course you will be able to also have access to the *Financial Times*. Go to http://ft.com/cmu and establish your free account with your Andrew credentials.

My general goal in public finance is to improve your ability to think analytically, and to draw conclusions from data/statistical results about how such facts relate to the widely accepted goals of a good tax system (efficiency, vertical and horizontal equity, administrative feasibility, revenue predictability and revenue productivity). Since taxation inherently involves taking resources from people and spending them through the public budget, and giving up resources for that purpose can readily be controversial, we will pay a great deal of attention to words used to accomplish both taking and spending. Students my find this level of focus unusual, as they may find the Socratic method of teaching which I use---I pose questions to students about course topics and expect them to provide answers on the fly to precipitate learning, and develop the capability of looking at a public sector problem from varying perspectives.

The format of the course is lecture/discussion [in English]. Students are encouraged to ask questions by proceeding as follows: 1) the interested student will raise his/her hand to be recognized by me, and then 2), if so recognized, will be invited to ask their question or answer a posed question/make a comment. Students who ask that the obvious be explained or simply make speeches and filibuster will not be recognized for comment. The use of a statement by any student that begins with "I feel like…" is strongly discouraged, as is the use of circular reasoning. (See: https://en.wikipedia.org/wiki/Circular_reasoning)

Please be advised that Public Finance prohibits the use of generative AI to answer homework or exam questions.

The Musgrave and Musgrave text (MM), which is free and available in the Canvas course environment is self-explanatory but extremely terse; the text *and* footnotes require careful reading. Lectures will typically involve elaboration of key points in the text, contain complementary examples drawn from the real world, and empirical material that I routinely accumulate. Each lecture/discussion session is designed to bring together the world of theory and the world of actual public financial practice, and to develop each student's analytical skills in the domain of public finance. Students are encouraged to have read the lecture outlines, assigned required reading material *prior* to lecture and will be asked questions about the assigned material. Because some of the statutory details about tax instruments have changed since the text was written, current institutional information is contained in Canvas and/or explained in lecture. For example, we will look at current federal tax return forms as a lens through which to see how taxation actually functions.

The course has been designed so that the student synthesizes the theory and institutions that are provided in the textbook and lectures, while the problem sets are designed to provide meaningful professional experiences for each segment of the course. Student learning takes place as a result of this synthesizing process and will help students learn how to think more clearly and thereby not be replaced by generative AI. Please be sure to take the time requirements of the course and problem sets seriously. That is, the course is a full semester 12 unit course which means that you are expected to devote 12 hours/week to the course which is composed of attending class, 3 hours/week, doing the reading and the homework.

We will be using Canvas for a variety of purposes. You access it by setting your browser to www.cmu.edu/canvas.

⁵ On Canvas you will find recommendations for software to put on your Windows or Mac laptop for terminal emulation and secure file Transfer. I also highly recommend you install VSCODE editor from the CMU Software portal as soon as possible. You will be asked in class 8/26/2024 whether or not you have read the software/hardware recommendations and accomplished the install of terminal emulation, file transfer, and VSCODE packages.

If feasible, class sessions will be recorded, and your attendance is required. We convene in Hamburg Hall 2011 for class sessions. Class will always be held Monday and Wednesday and sometimes on Friday. The exact schedule is below with occasional Friday sessions noted. On Friday August 30, the class will meet for a presentation by Hunt Social Science Reference Librarian, Ms. Sarah Young, about course resources pertinent to public finance and available at Hunt Library; she will do this via a recorded Zoom session. There will be a SAS tutorial on at least one Friday (September 6), and Friday review sessions in the 3:30-4:50 PM time slot, or an occasional makeup or catch-up class if we are unable to meet M or W. These Friday sessions will be held on Friday from 3:30-4:50PM on the same basis as regular classes MW.

There will be occasional guest *luncheon* speakers (noon to 1pm) who are distinguished practitioners in areas related to this course; **Attendance is Required.**

Dr. Stuart Hoffman, emeritus Chief Economist of PNC will give his annual lecture on the economic outlook; Monday September 30 from noon to 1PM; room to be announced. This is a confirmed speaker, so plan accordingly.

Other possible speakers include:

- 1. Dr. Wendell Primus, former direct report to US House Speaker Nancy Pelosi (now at Brookings)
- 2. Dr. Mark Mazur, retired, former Assistant Secretary for Tax Policy, US Treasury; former Director of Statistics, EPA; former Director of Research IRS; former Director of Brookings-Urban Institute Tax Policy Center [and former SUPA faculty member]
- Dr. Bobby Conrad, my former undergraduate student at UNC, co-author, former Director of Central and Eastern Europe Technical Assistance Office of the US Treasury, and retired professor from Duke's Sanford School of Public Policy;
- 4. Dr. Kathleen Peroff, retired from OMB after being the top senior civil servant in charge of the budgets of the US Department of Defense and the 14 US national security agencies (CIA, NSA, DIA etc.) has agreed to give a talk. She has 5 Presidential Awards during her 35 years at OMB, compared to my 2 presidential pens in 5 years of federal service.
- 5. Dr. Prodipto Ghosh, Retired Cabinet Secretary of the Interior, Government of India.

Office hours are before class Monday and Wednesday from 2-3:15 PM MWF, either in person or via Zoom, and appointment. If any issues arise which you want to discuss, I'm happy to do so privately. It's easy to communicate with me via email (<u>rpstrauss@gmail.com</u> or <u>RS9F@Andrew.cmu.edu</u>) as I am usually logged in from somewhere in the world around the clock.

Evaluation of student performance is based on written essay examinations, problem sets, class participation.

Answers to each of the problem sets <u>must be word processed</u>, and must contain written, verbal explanations of all numerical results. **Problem sets 2-7 are to be turned in via email in MS Word 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. <u>Problem Sets 1, 4, and 7 may be completed in groups. Again, use of Generative AI is prohibited.</u>**

There will be three short-answer, written examinations: at six weeks, at twelve weeks, and at the end of the semester worth respectively 20%, 20%, and 30%. You may drop the lowest score of the two midterm exams and the respective weights then become 35% for each exam. The final examination will cover the entire course and must be taken, while the two mid-term exams will cover the material in the immediately preceding six weeks. There are seven problem sets, each worth 4%. You may drop the lowest problem set score if you wish so that the 6 that are counted are worth 28 / 6 = 4 .667 % each.

All problem sets MUST be word processed, and sent to me via email at <u>rpstrauss@gmail.com</u> using the syntax: Your last name_first_name_problem set or exam number_date and a suffix of .doc.

Example:

strauss_robert_ps1_9_6_2024.docx

Class participation is worth 3%. If you do not attend class, [which means are in your seat and continuously in the classroom until the end of class], you will be penalized.

If you believe that you have been unfairly graded, the procedure for appealing a grade is to put a post-it with a request for re-grading on a printed version of the evaluation [problem set or exam] and give it to me; I will re-grade it privately and return it to you with the revision, if any, in your grade. Please be advised that in submitting a problem set or exam for regarding, I reserve the right to re-grade other parts of it.

The grading scale, stated in Points, is: A+

	> 100.0	
А	95.0-100.	
A-	90-94.9	
$\mathbf{B}+$	85.0-89.9	
В	80.0-84.9	
B-	75.0-79.9	
C+	70.0-74.9	
С	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		

Finally, a few reminders about decorum, and classroom procedures.

First, there is a no-touching rule in class. This will be explained in class.

Second, there is a no-eating rule. Coffee, water, soft drinks only.

Third, there is a prohibition against engaging in texting, using a cell phone or other kinds of non-academic conduct during each class session.

This also means there is a prohibition against watching movies or other kinds of non-public finance entertainment. More specifically: Portable or cellular telephones, beepers, pagers, televisions, radios, hand-held video games, iPods, other MP3 players, CD, radio headsets, and virtual reality headsets (for non-public finance use) are **not** permitted for use in the classroom. Laptops, notebooks etc., and other electronic devices are only for note taking related to the class, and are permitted.

Any student who uses his/her laptop etc. in class for emailing, Instant Messaging, music, browsing the net etc. on matters unrelated to the course will be asked to leave the classroom. Since class lecture outlines and associated required and optional readings are provided via Canvas, you are best advised to have read them ahead of time.

Fourth, students, of any gender are expected to dress and conduct themselves professionally; and

Fifth, the class begins promptly at 3:30 PM Eastern Standard Time which is based on my Fitbit Ionic watch which is synched via an atomic clock somewhere on the internet, and is the official arbiter of what time it is. I may lock the classroom door to encourage timely attendance. Each class will begin with a review of the day's agenda, AND the recitation of the course chant. Each student will be asked to recite one of the assigned course chant:

- 1. Does the duration of the policy match the duration of the financing?
- 2. <u>Who</u> is the taxpayer?
- 3. <u>What</u> is being taxed?

- 4. <u>*How*</u> much is 'it' being taxed?
- 5. <u>Where</u> is 'it' being taxed;
- 6. <u>When</u> is 'it' being taxed?

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- 7. <u>What</u> are the privacy assurances surrounding taxation?
- 8. <u>*Why*</u> is it being taxed? Income as barometer to finance services?
- 9. What are the financial and personal liberty consequences of various answers to the questions 1-7

Students are expected to be ready for the class on **or before** the appointed times, and remain in the class throughout the class session. While absence from class is not explicitly penalized, (attendance is merely required) other than for attending mandatory lunch lectures, it is fair to say that attending class will materially improve your learning about public finance, and better prepare you for exam questions, since topics discussed during class session are, by definition, fair game for being on any exam. If I ask a question of a student who chooses not to be in the class, I will make note that the student failed to answer the question. This will be counted in the class-participation portion of his/her grade.

Meeting	Lecture	Date	Торіс	Required Reading
1		Aug 26 (M)	Introductions	Course Syllabus, A Free Nation
		-	In class equity practicum with Strauss Bucks	Deep in Debt: Chapter1
			Background survey, Syllabus, Canvas Site Review	
			National Debt Clock,	
			Blues Brothers video,	
			https://www.youtube.com/watch?v=1awyzvPnY_o	
			Discussion of Chapter 1 of Free Nation in Debt	
			Course Overview: assigned questions to be emailed	
2	1	Aug 28 (W)	The Public Sector: Functions and Institutions	MM 1-3, 8, see tables in notes*
		Aug 30 (F)	Hunt Library Presentation via Zoom	Bring your laptop
		Sept 2 (M)	LABOR DAY: NO CLASS	
3	2	Sept 4 (W)	Public Goods	MM 4, 5
4		Sept 6 (F)	Computer Tutorial 1: Using Andrew, editing with	3:30PM-4:50 PM
			nano, VSCODE, SAS, Stata using Canadian dataset	Bring laptop
5	3	Sept 9 (M)	Public Choice: Mechanisms and Dilemmas	MM 7
6	4	Sept 11 (W)	Introduction to Taxation: Equity and Efficiency	MM 6, 12-14
7		Sept 13 (F)	Computer Tutorial 2: SAS Tutorial 2:	Bring laptop
8	5	Sept 16 (M)	Tax Incidence and Excess Burden I	MM 15-16, see graphs in notes*
9	6	Sept 18 (W)	Tax Incidence and Excess Burden II	MM 16-17
10	7	Sept 23 (M)	Taxation of Individual Income I	MM 19-20, article in notes*
11	8	Sept 25 (W)	Taxation of Individual Income II	MM 19-20, see tables in notes*
12	9	Sep 30 (M)	Sales and Gross Receipts Taxation I	MM 23
13		Oct 2 (W)	Review	
14		Oct 4 (F)	Exam 1: 10 ESSAY QUESTIONS (20%) 1.5	
15	10	Oct 7 (M)	Business Taxation I: Rationale, Classical System	MM 21-22
16	11	Oct 9 (W)	Business Taxation II: Federal and State Issues	MM 21, 22, article in notes*
17	12	Oct 21 (M)	Foreign Tax Issues	MM 33
18	13	Oct 23 (W)	Gift and Estate Taxation	MM 25
19	14	Oct 28 (M)	Property Taxation I	MM 24, article in notes*
20	15	Oct 30 (W)	Property Taxation II	MM 24
21	16	Nov 4(M)	Social Insurance and the Payroll Tax	MM 26
22	17	Nov 6 (W)	Other Transfer Programs	MM 11, see tables in notes*
23	18	Nov 11 (M)	Fiscal Federalism: Revenue Sharing Formula Design	MM 28-29, article in notes*
24	19	Nov 13 (W)	Fiscal Federalism: Using Grants to Achieve Civil Rights/Nondiscrimination	Canvas: Conference Report
25	20	Nov 18 (M)	Tax Administration	Articles in Canvas
		Nov 20 (W)	Review	
24		Nov 25 (M)	Exam 2: 10 ESSAY QUESTIONS	
		Nov 27 (W)	Thanksgiving Break	
26	20	Dec 2 (M)	Stabilization Policy I, II	MM 30-32
27	21	Dec 4 (W)	Stabilization Policy III, IV	MM 30-32
28		Dec 6 (F)	Review	
29		Dec 9 (M)	Final Exam: 15 Essay Questions (tentative)	
				1

The course calendar is below. Please note I distinguish between a Meeting and a Lecture.

Robert Strauss is inviting you to a scheduled Zoom meeting.

Topic: Public Finance Time: Aug 26, 2024 03:30 PM Eastern Time (US and Canada) Every week on Mon, Wed, Fri, 1 occurrence(s) Aug 26, 2024 03:30 PM Please download and import the following iCalendar (.ics) files to your calendar system. Weekly: https://cmu.zoom.us/meeting/tJcudeGgrDwtGtwmOxeQGBBTUAkzbNi72mG0/ics?icsToken=98tyKuCrrTkiEtaStxmPR owqA4joWfzzpmZajbdKkTD9BhF0QCHCA8NJKLBRGY-C

Join Zoom Meeting https://cmu.zoom.us/j/93328827708?pwd=ciE1G0ET2PtV1SPo4hXvzPo7pXLs0a.1

Meeting ID: 933 2882 7708 Passcode: 324314

- Key: * denotes required close reading
 denotes required skim
 denotes optional reading

Note: All readings may be found on Canvas, either in the lecture packets or as a separate hyperlink.

Lecture	Readings in the Notes: Required =*; Optional = **
1	A CBO Study:
	1. The Budget and Economic Outlook: CBO, (Exec. Summary, Chapter 1). *
	(NOTE: Closely read the summary, pages $1 - 6$, skim chapter 1.)
	2. Forecasting by Rudolph G. Penner. *
	3. The Pension Rate-of-Return Fantasy by Andy Kessler. **
2	1. Japanese Reform: Sinking, not Flying. *
	2. The Wall Street Journal: <i>The Other Pension Crisis.</i> **
3	N/A
4	1. Estimates of Federal Tax Expenditures for Fiscal Years 2017-2021, JCT, January 30, 2017. * (NOTE: Closely read
	the introduction and section 1, we will look at tables in class.)
	2. Chinese Dilemma: 170 Auto Makers. **
	3. Rethinking Energy Subsidies by David Wessel. **
	4. U.S. Steel to keep Slovakian plant in return for energy subsidies by Len Boselovic. **
	5. Novel Relief for China Woes by Michael Rapoport. **
	6. Shultz and Becker, Why We Support a Revenue-Neutral Carbon Tax. **
5	Berliant & Strauss Journal Article [*] (see hyperlink on Canvas)
6	
7	1. 2017/8 Tax Forms 1040, Schedules A, B, C Tax Computation Worksheet, Tax Rate Schedules, AMT (6251). **
	2. A Handy Summary of the Capital Gains Arguments by Walter J. Blum *
	3. Mathur, Slavov, and Strain: Should the Top Marginal Income Tax Rate Be /3 Percent? **
	4. The Revenue Deficit from Progressive Tax Rates by Michael Solon. **
0	5. Raising and Redistributing Taxes in a Token Economy: Winners and Losers. *
8	1. Leiserson and Rohaly, The Individual Alternative Minimum Tax. **
	2. Leonard E. Burman testimony: The Individual Alternative Minimum Tax. **
	3. Special Report: The Earned Income Tax Creati and the Child Tax Creati Under the Tax Act of 2001. **
	4. Ine AMI Trap that Caught Teresa Heinz Kerry in 2005 by Gregory Geisler. ***
0	5. A CBO Study: For Better or for Worse: Marriage and the Federal Income Tax. * (NOTE: Read summary closely.)
9	1. Special Report/ viewpoint: The Effects of a Flat Federal Consumption Tax on the States by Robert P. Strauss. *
	2. Federal Tax Mechanisms to Endote State Taxation of Final Consumption by Strauss. *
	5. A Frimer on Changing Information Technology and the FISC by Join M. Fena & Robert Strauss.
	4. One simple rate, steve forbes.
10	1. Federal Tax Policy and the Market for Corporate Control: Relationships and Consequences by Robert P. Strauss. *
	2. A New Era in Corporate Taxation: Testimony Before the Committee on Finance by Martin A. Sullivan. **
	3. Memorandum on Inventory Accounting Methods published by Joint Committee on Taxation. **
	4. Present Law and Legislative Background Relating to Depreciation and Section 179 Expensing, the JCT. **
	5. Testimony of George A. Plesko. ***
	6. Mills, Newberry, and Trautman: Trends in Book-Tax Income and Balance Sheet Differences. **
	7. 2010 Depreciation Guide featuring MACRS. **
11	N/A
12	1. The Case Against Taxing Citizens by Reuvan S. Avi-Yonah. **
	2. Double Irish arrangement, Wikipedia. **
13	1. The Curious Story of Erehwemos (With Apologies to Samuel Butler) by Harold Pepperell. *
	2. Jenny Bourne et al **
	5. The Estate Tax: Minety Years and Counting by Darien B. Jacobson, Brian G. Raub, and Barry W. Johnson. **

Lecture	Readings in the Notes: Required =*; Optional = **
14 & 15	1. Property Taxation in the United States Today. *
	2. State Education Finance Communications: Why Call for Property Tax Relief? By Robert Strauss. *
	3. The Assessment of Residential Property in Allegheny County – Report 2: Sources of State Variations in Assessment
	Quality by Robert P. Strauss. *
	4. Pa. State Tax Equalization Board Common Level Ratios: 1982 – 2009. ** ←=update
	5. Is Assessment 2005 Going to be Reform or Allegheny County's Version of "Ground Hog Day?" by Robert P. Strauss
	6. Restoring the Public Trust in Allegheny County's Real Estate Assessments by Robert P. Strauss
	7. Robert P. Strauss & David A. Strauss, <i>Residential Real Estate Fairness in Four Urban Areas.</i> **
	8. Robert P. Strauss, A Sales Ratio Study of the City of Philadelphia, May, 2013 **
16	1. Status of the Social Security and Medicare Programs, A Summary of the 2018 Annual Reports, Esp. Charts B. C
	https://www.ssa.gov/oact/trsum/ *
17	1. Special Report/Viewpoint: Revising the Medicaid Reimbursement Formula in an Era of Fiscal Austerity by Robert P.
	Strauss. *
	2. CBO Testimony: Means-Tested Programs and Tax Credits for Low-Income Households by Jeffrey Kling. **
18	N/A
19	1. General Revenue Sharing: How Well Is It Working? by Robert P. Strauss. *
	2. State and Local Fiscal Assistance Amendments of 1976: Conference Report. * (NOTE: Closely read the
	Nondiscrimination Section, pages $31 - 40.$)
20	1. III. Effects of Complexity on the Present-Law Federal Tax System. *
	2. IV. Efforts of Foreign Countries to Simplify Their Tax Laws *
21	N/A
22 & 23	1. Fairmodel most recent U.S. Forecast https://fairmodel.econ.yale.edu/
	2. Fairmodel most recent appendix

Problem Sets

Problem	Out/Due	Nature of Problem Set	EST. TIME in HOURS
Prob 1	Out: 9/1 Due: 9/9	SimCity 2000: Understanding the Budget Constraint <u>NOTE</u> : You must purchase and install it for under \$5.00 Instructions will be on Canvas (Group Problem Set)	3
Prob 2	Out: 9/9 Due: 9/16	Reading and Interpreting the Internal Revenue Code	3
Prob 3	Out:9/16 Due: 9/25	Sacrifice Theory, Excess Burden and Efficient Taxes	3
Prob 4	Out: 9/25 Due: 10/21	Individual Taxation with SAS using Canadian 2009 CEX (Group Problem Set)	5
Prob 5	Out:10/21 Due: 11/4	Business Depreciation Policy, Warp Depreciation	3
Prob 6	Out: 11/4 Due: 11/25	Property Taxation: Equity and Appraisal Analysis of Residential Properties in Allegheny County3	
Prob 7	Out:11/25 Due: 12/6	Macro-Public Finance: Stabilizing the US Economy with Fair Model (Group Problem Set)	4 Hours

Calendar View of Textbook Reading/Homework

Notation: Lecture Session / Day of Month: [MM chapters]

homework

Monday	Wednesday	Friday
August		
0/26: overview	1/ 28:[1-3]	0/ 30: Hunt Library
September		
0/2: Labor Day; #1 out	2/ 4: [4,5]	0/ 6: SAS/Stata tutorial 1
3/9:[7]; # 1 due,#2 out	4/11:[6,12-14]	0/13: SAS/Stata tutorial 2
5/16:[15,16]; #2 due,#3 out	6/18:[16,17]	0/20: optional recitation
7/ 19:[19,20]	8/ 25: [19,20]; #3 due,#4 out	0/27: optional recitation
September	October	October
9/ 30:[23]	0/ 2: Review	0/4:10 Midterm 1 10 short essay questions
October	October	October
10/7:[21,22]	11/9:[21,22]	0/11: optional recitation
14 Fall Break	16 Fall Break	12 Fall Break
12/ 21:[33] #4 due,#5 out	13/23:[25]	0/25: optional recitation
14/28:[24]	15/ 30:[24]	
November	November	November
16/ 4:[26]; #5 due, #6 out	17 6:[11]	0/ 8: optional recitation
18/ 11:[28,29]	19/ 13:[28,29]	0/15: Review
0\ 25: Midterm 2 10 short		
essay questions;		
#6 due , #7 out	27 Thanksgiving Break	29 Thanksgiving Break
December		
2/20:[30-32]	4/21:[30-32]	0/ 6: Review #7 due
9 Final Exam 15 short		
essay questions #7 due		