1. Course objectives
   To provide an understanding of basic economic concepts and tools used by economists and show how economists use these in thinking, talking, and writing about issues of government spending, taxing, and regulation.

   To provide an understanding of the economist’s view of how world works and the contributions of this view to thinking about public policy and budgeting issues.

2. Required texts and readings
   Texts


   Readings
   ftp://urban.csuohio.edu/utility/songpyo
   n:\songpyo

3. Course requirements
   Midterm1, July 15 (20%)
   Midterm2, July 29 (20%)
   Final Exam, August 12 (50%)
   Participation (10%)

   Exam format is similar to homework questions. And you should be prepared to write short essay and long essay questions as well. It will be open book test.

   Optional paper: This is the option for the ones who need extra credit or the one who just want to do it. Select the topic that is related to public economics and policy, such as education, knowledge economy, health, poverty, housing, government finance, etc. It could be related with your work. You have to submit the hard copy of the paper on the date of final exam.
The paper should include; introduction; research question that you are asking; the importance of research question; what other scholars talk about it; how are you going to answer this question; what is expected results; and what is the policy implication.

4. Grading policy
A= 93-100%, A-=87-92%, B+=81-86%, B=75-80%, B-=70-74%, C=60-69%, and F<59%

5. Course outline
Reading assignment should be completed prior to coming to the session indicated. PAGE NUMBERS FOR THE NEW EDITIONS OF THE TEXTS ARE LISTED IN BRACKETS. PAGE NUMBERS FOR THE EARLIER EDITIONS ARE LISTED IN PARENTHESES. Read Sharp assignments before the Hyman assignments where both are assigned. In the Sharp text, try to understand the basic economic arguments and don’t dwell on the institutional data.

**Session 1: July 6**
Scarcity and the need to choose; Opportunity cost; The nature of economic theory; Economic efficiency; Supply and Demand
Assignments: Sharp et al., Chapters 1, 13(358-363)
Hyman, Chapters 1 [2-29] (3-28), 2 [52-59] (52-59)
Landsburg, Chapter 1

**Session 2: July 8**
Supply and Demand
Assignments: Sharp et al., Chapter 2
Landsburg, Chapters 4, 5

**Session 3: July 13**
Supply and Demand; Markets, efficiency, and the role of government; The effects of subsidies and regulation on efficiency; Efficiency versus equity
Assignments: Sharp et al., Chapter 14 [414-418] (387-391).
Hyman, Chapters 1[41,51] (41, 50-51), 2 [59-76] (59-75)
Landsburg, Chapters 7,8

**Session 4: July 15**
Midterm 1

**Session 5: July 20**
Rationale for government action; Externalities and public goods
Assignments: Sharp et al., Chapters 4, 6
Hyman, Chapters 3, 4[141-154, 165-169] (139-152, 162-167)
Landsburg, Chapter 9, 24


**Session 6: July 22**

**Methods of expenditure analysis and budgeting**

Assignments: Hyman, Chapter 6
Landsburg, Chapter 10


**Session 7: July 27**

**Income distribution and redistribution**

Assignments: Sharp et al., Chapters 3, 7
Landsburg, Chapter 13.


**Session 8: July 29**

**Midterm 2**

**Session 9: August 3**

**Principles of taxation**

Assignments: Sharp et al., Chapter 14
Landsburg, Chapters 6, 11

Session 10: August 5
**Principles of taxation (cont’d)**

Assignments: Sharp et al., Chapter 15

Diamond, Peter A. “Proposals to restructure Social Security.” Journal of Economic Perspectives 19 (Spring 2005), pp.11-32


Session 11: August 10
**Public choice and politics of budgeting and taxation**
Hyman, Chapter 5


**Federalism; Global market; Limitations of Economics**
Assignments: Sharp et al., Chapter 10
Hyman, Chapter 18 [688-709, 713-720] (675-697, 701-708)


Session 12: August 12

**Final exam**
**Optional paper due**

6. Homework questions
The following questions are designed to help you test your understanding of and ability to apply course material. You should come to the session indicated below prepared to both provide an answer to the questions assigned and also explain your reasoning for your answers, drawing graphs where appropriate. Your exams will take the form of questions of this type.
Session 2

1. Which of the following changes will have no effect on the position of (i.e. will not shift) the production possibility frontier for a country
   a. the discovery of new oil reserves in that country
   b. severe flooding
   c. the development of new and more efficient methods of steel production
   d. illegal immigration
   e. none of above

2. The existence of scarcity as an economic problem arises because:
   a. business corporations are too greedy
   b. inadequate education and training of workers
   c. our wants exceed our resources
   d. too many people are out of work
   e. all of the above

Questions 3-4 are based on the following information:

A study has been instituted to determine the benefits and costs of job training program at different levels and the results are listed in the following table. Figures for costs for job training are also included:

<table>
<thead>
<tr>
<th>Units of job training</th>
<th>Total Social Benefit</th>
<th>Total Social Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$70,000</td>
<td>$55,000</td>
</tr>
<tr>
<td>2</td>
<td>$135,000</td>
<td>$110,000</td>
</tr>
<tr>
<td>3</td>
<td>$195,000</td>
<td>$165,000</td>
</tr>
<tr>
<td>4</td>
<td>$250,000</td>
<td>$220,000</td>
</tr>
<tr>
<td>5</td>
<td>$300,000</td>
<td>$275,000</td>
</tr>
<tr>
<td>6</td>
<td>$345,000</td>
<td>$330,000</td>
</tr>
<tr>
<td>7</td>
<td>$385,000</td>
<td>$385,000</td>
</tr>
<tr>
<td>8</td>
<td>$420,000</td>
<td>$440,000</td>
</tr>
</tbody>
</table>

3. The estimated marginal social benefit of the sixth unit of job training is:
   a. $345,000
   b. $25,000
   c. $45,000
   d. $55,000
   e. $330,000
4. The economically efficient level of job training is:
   a. 4 units
   b. 7 units
   c. 8 units
   d. 5 units
   e. 0 units

Session 3

1. Which one of the following will not cause an increase in the demand for higher education (i.e. shift the demand curve to the right):
   a. an increase in incomes of college graduates
   b. increased government financial aid to students
   c. a reduction in tuition
   d. an increase in population

2. According to supply and demand, tightening restrictions on the loads that truckers can carry and on the hours they can work will lead to (hint: road and rail freight can be considered substitutes for buyer):
   a. an increased supply of trucking service
   b. lower prices for trucking services
   c. higher prices for freight carried by rail
   d. a. and b.
   e. all of the above

3. During this Spring, the price of oil rose and there was also an increase in the amount of oil traded. This suggests that there must have been:
   a. a reduction in the demand for oil
   b. a reduction in the supply of oil
   c. an increase in the demand for oil
   d. an increase in the supply of oil

4. The existence of a shortage of day-care services means that:
   a. the quantity demanded of services exceeds quantity supplied
   b. the price of day-care services will increase
   c. this is an example of market failure and an indication government ought to finance the provision of more services
   d. a. and b.
   e. all of the above
Session 4.

1. Taxi-cab drivers in a city must obtain city licenses to do business. There is an increase in the number of licenses made available to drivers. As a result, taxi-cab revenues decrease. This suggests that the elasticity of demand for taxi-rides with respect to price is:
   a. less than one
   b. greater than one
   c. equal to one
   d. we can determine nothing about elasticities from the data given
   e. the law of demand does not seem to apply here

2. Assuming that the price elasticity of demand for illegal drug is zero, then according to supply and demand theory, tougher enforcement of laws against drug sellers will lead to:
   a. higher prices for drug
   b. a reduced equilibrium quantity of drug consumed
   c. increased revenues overall for drug sellers
   d. a. and c.
   e. all of the above

3. If the output of education is Pareto-optimal, this means that:
   a. the marginal social benefit of education exceeds its marginal social costs
   b. it is impossible, in changing education output, to make someone better off without making someone else worse off
   c. equity in the availability of education is secured
   d. a. and b.
   e. a., b., and c.

4. Assuming that a competitive market for human organs, for purpose of transplants, would be efficient, a ban on the sale of human organs would be expected to lead to (Assume here that the ban would have some effect but than an illegal make would exist):
   a. economic inefficiency because the marginal social benefit of human organs will exceed the marginal social cost
   b. economic inefficiency because the marginal social cost of human organs will exceed the marginal social benefit
   c. a reduction in the price of organ transplant
   d. a. and c.
   e. b. and c.
Session 6
1. The marginal cost per unit of a pollutant discharged into a river by a competitive chemical company is estimated at $180 per ton. A pollution tax is $80 per ton is in effect. The marginal cost to the firm of cleaning up a ton of discharge is $100 at current clean-up levels. Given these conditions:
   a. the firm will not clean up any more of the discharge and this is the correct decision from the point of view of economic efficiency
   b. the firm will not clean up any more of the discharge but this is not the correct decision from the point of view of economic efficiency because pollution is not reduced
   c. the firm will clean up more of the discharge and this is the correct decision from the point of view of economic efficiency
   d. the firm will clean up more of the discharge but this is not the correct decision from the point of view of economic efficiency

2. An external cost results from the sale of firewood in a competitive market. It follows that at market equilibrium:
   e. the marginal private benefit of firewood exceeds its marginal social benefit
   f. the marginal social cost of firewood exceeds its marginal social benefit
   g. the marginal private cost of firewood exceeds its marginal social benefit
   h. less than the efficient amount of firewood is produced
   i. none of the above

3. An example of external benefits arising from higher education would include:
   j. increased income of university graduates
   k. income earned by college professors
   l. new scientific knowledge
   m. all of the above
   n. none of the above

4. Which of the following is a pure public good:
   f. water provided by public utility
   g. a public program to eliminate a communicable disease
   h. public education
   i. public housing
   j. all of the above
Session 7

1. An investment provides a return of $2,000 per year for the next nine years. Assuming 8% discount rate, the most you should be prepared for this investment is:
   a. $6,250
   b. $12,500
   c. $1,100
   d. $16,000
   e. $10,670

2. A city is currently paying private contractors $150,000 per year for snow removal from streets. A small fleet of snow removal trucks would eliminate the need to pay private contractors. The trucks would cost the city about $600,000 to purchase and $50,000 per year thereafter to operate. The trucks would last about thirteen years and have no salvage value. On the basis of a cost-benefit analysis, assuming 10% discount rate, the net present value of investing in the fleet, instead of continuing to contract out for snow removal, is:
   a. about $710,000 and the trucks should be purchased
   b. about $110,000 and the trucks should be purchased
   c. about $10,000 and the trucks should be purchased
   d. about $60,000 and the trucks should be purchased

3. Two government projects each have an investment cost of $4 million. Project A yields no benefits for the first three years and then yields $2 million per year for three years. Project B yields $1 million each year for six years. Assuming a discount rate greater than zero, which of the following statements is accurate:
   a. since both projects have the same investment cost and yield the same total future benefits of $6 million across six years, their net present values to the community are the same
   b. since total future benefits exceed the investment cost for both projects, both projects must always have a positive net present value
   c. the net present value of project A will be greater than the net present value of project B
   d. the net present value of project B will be greater than the net present value of project A
   e. c. or d. may be true depending on the discount rate selected

4. In cost-benefit analysis of irrigation capital projects, using a discount rate which is lower than that which measures the true opportunity cost to society of resources invested in a capital project:
   a. will lead to the adoption of irrigation projects that are not justifiable on efficiency grounds
   b. will lead to the rejection of irrigation projects which are justifiable on efficiency grounds by lowering their rate of return
   c. is economically justifiable if the government can borrow funds at lower rate
   d. is economically justifiable since irrigation provides a public good
Session 8

1. Food stamp program:
   a. leads to an output of food such that MSB>MSC
   b. leaves recipients better off than they would be if they received the same dollar aid in the form of cash
   c. promotes efficiency in the consumption and production of food
   d. all of the above
   e. none of the above

2. The effects of a price ceiling imposed on all pharmaceutical drugs at a level below equilibrium prices would include:
   a. an increased quantity of drug available
   b. a loss of mutually beneficial trade between drug buyers and sellers
   c. reduced investment in pharmaceutical research
   d. a. and b.
   e. all of the above

3. Families of three are to be supported at a minimum income of $16,000 per year by a negative income tax program with a tax rate of 40%. A family of three earns an income of $20,000. Its total income, including the earned income and the negative tax payment will be:
   a. $28,000
   b. $8,000
   c. $36,000
   d. $24,000
   e. $20,000

4. According to supply and demand, the beneficiaries from rental subsidies provided to low-income tenants do not include:
   a. landlords
   b. low-income tenants
   c. all tenants
   d. a. and b.
   e. all of the above
Session 10

1. If the ability to pay principle is interpreted as simply meaning that people with more income should pay more taxes, then:
   a. progressive income tax rates are consistent with this principle
   b. proportional income tax rates are consistent with this principle
   c. regressive income tax rates may or may not be consistent with this principle
   d. all answers above are correct

2. An income tax taxes all income below $30,000 at 10% and all income in excess of $30,000 at 20%. A household earning $60,000 faces:
   a. an average tax rate and marginal tax rate of 20%
   b. an average tax rate and marginal tax rate of 15%
   c. an average tax rate of 15% and a marginal tax rate of 20%
   d. an average tax rate of 20% and a marginal tax rate of 15%
   e. an average tax rate of 10% and a marginal tax rate of 20%

3. A tax is imposed on fast food as a means of lowering cholesterol levels and heart-care costs. The tax is levied on fast food producers. It follows that:
   a. the fall in fast food consumption and the burden of the tax on buyers will be greater, the less elastic is the demand for fast food with respect to price
   b. the fall in fast food consumption will be greater and the burden of the tax on buyers will be smaller, the less elastic is the demand for fast food with respect to price
   c. the fall in fast food consumption will be smaller and the burden of the tax on buyers will be greater, the less elastic is the demand for fast food with respect to price
   d. the fall in fast food consumption and the burden of the tax on buyers will be smaller, the less elastic is the demand for fast food with respect to price

4. In the absence of market failures, tax preferences given to certain activities under the Federal income tax:
   a. decrease efficiency by encouraging less than the efficient amount of the activities to be undertaken
   b. decrease efficiency by encouraging more than the efficient amount of the activities to be undertaken
   c. have a larger effect on the level of the activities when income tax rates are reduced
   d. a. and c.
   e. b. and c.
Session 11

1. If a poor family has three children in public school and a rich family has two children in private school, the benefits principle would suggest that:
   a. the poor family should pay more in taxes to pay for public education than the rich family
   b. the rich family should pay more in taxes to pay for public education than the poor family
   c. the benefits of private school exceed those of public school
   d. public schools should be financed by property taxes

2. Assuming that the economic burden of the property tax is borne by the owners of wealth or capital, the substitution of state sales taxes in place of local property taxes as a revenue source for public education is likely to make the overall state and local tax burden:
   a. more regressive with respect to income than before
   b. more progressive with respect to income than before
   c. neither more regressive or progressive since both are flat-rate taxes
   d. neither more regressive or progressive since both are regressive taxes

3. A tax leads to an excess burden or efficiency loss because:
   a. it induces the government spend more
   b. it induces buyers to consume less and sellers to produce less
   c. it causes a disequilibrium in the market
   d. the loss to buyers is greater than the loss to sellers

4. Assuming that wage levels are higher for lawyers working in the private sector than for lawyers in the public sector. An increase in the tax rate on higher income will lead to:
   a. an increased supply of lawyers working in the public sector
   b. a reduced supply of lawyers working in the private sector
   c. higher before tax wages for public sector lawyers
   d. both a. and b.
   e. all of the above
Session 12

1. A county Commission with three members (Brown, Waters, and Smith) is faced with choosing one of the three programs: a day-care program (D), a rehabilitation program for substance abusers (R), and homeless shelter (H). Commissioner Brown prefers D to R and R to H. Commissioner Waters prefers R to H and H to D. The expressed majority preferences turns out to be arbitrary and unstable. What are Commissioner Smith’s preferences?
   a. She prefers D to H and H to R.
   b. She prefers H to R and R to D.
   c. She prefers H to D and D to R.
   d. She prefers R to D and D to H.
   e. None of the above.

2. Three equal size groups, A, B, and C, are voting on the building of a public recreational facility. The facility will provide $8,000 of annual benefits per head to members of group A, $7,000 of benefits per head to group B, and $1,000 of benefits per head to group C. The annual cost to be shared equally will be $6,000 per head. According to economic theory:
   a. majority rule will result in building the facility
   b. the facility should be built on efficiency grounds
   c. the facility should not be built on efficiency grounds
   d. a. and b.
   e. a. and c.

3. According to public choice, health-care policy makers are most likely to be subject to organized political pressure exerted by groups of:
   a. doctors
   b. taxpayers
   c. patients
   d. voters

4. Examine again the data for the job training program used above in the homework for Session 2 in question 3 and 4. Assuming that the program was delivered by a budget-maximizing bureaucracy:
   a. the bureaucracy will produce 7 units and this is the efficient amount
   b. the bureaucracy will produce 4 units and this is the efficient amount
   c. the bureaucracy will produce 7 units and this exceeds the efficient amount
   d. the bureaucracy will produce 7 units and this is smaller than the efficient amount
   e. the bureaucracy will produce 8 units and this is more than the efficient amount