Course Outline

Course Description The subject of this course is public economics. Public economics is concerned with the study of all aspects of government activity and its impact on society. (This is in contrast to public finance which addresses the allocation of government expenditure and the sources of government funding.) The detailed course outline below describes the subject matter of public economics: market efficiency and the role for government policy, welfare considerations, regulation and market structure, incentives and constrained efficiency, informational issues in the provision of goods and services, market failures and income distribution.

Course Objectives. The aims of this course are:

1. To identify the major areas and roles for government activity.
2. To analyze the key issues and challenges in implementing government policies.
3. To study the specific costs and benefits of government intervention.
4. To identify methodologies and resolutions across a spectrum of policy arenas — such as regulation of markets to alleviate inefficiency, the provision of public health insurance, and so forth.

Intended Learning Outcomes (ILOs)

On completion of this course, students should:

ILO1: Know the scope and breadth of public economics.
ILO2: Be able to understand the core principles of efficiency and welfare distribution and their application to problems in public economics.
ILO3: Know the major areas of application of public economics, how market failures arise, and understand the key tools used in the remedy of market failure.
ILO4: Utilize the detailed skills and techniques to address and facilitate public economic policy, such as mechanism design schemes and multiple tariff structures.
ILO5: Understand the social objectives of public policy and the role of public economics in various countries.

Alignment of Program and Course Outcomes

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<tr>
<th>Program Learning Outcome</th>
<th>Course Learning Outcome</th>
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<tr>
<td>1. To master current theory and knowledge in the field of economics</td>
<td>ILO’s 1, 2, 3, 4 &amp; 5</td>
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<td>2. To master the skills to deal with economic data</td>
<td>ILO’s 2, 3 &amp; 4</td>
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<td>3. To develop the ability to apply economics to real world problems</td>
<td>ILO’s 3 and 4</td>
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<td>4. To develop global and regional outlook and astuteness</td>
<td>ILO 1 &amp; 5</td>
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The course consists of 36 hours of lectures and the study of specific issues during term via regular assignments.

**Course Teaching and Learning Activities.**

1. Lectures on principles of public economics, the primary subject matter and focus of the theory and practice. Applications include the management and regulation of capital markets, incentives in health care provision, problems in income distribution, and so forth. All material presented by slide and distributed to students prior to class. Major focus: ILO’s 1-5.

2. Graded assignments exploring issues and problems in public economics to build understanding and analytical strength. Major focus: ILO’s 3 and 4.

3. In class discussion to provide perspective and familiarity with the field. Major focus: ILO’s 1 and 5.

4. The course is self contained. Lecture materials distributed prior to class covering all the subject matter. Major focus ILO’s 1-5.

**Assessment Methods.** Course performance is assessed as follows:

1. Assignments: 20% of final grade
2. Final Exam: 80%

**Standards for Assessment** (Course Grade Descriptor).

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<tr>
<th>Grade</th>
<th>Description</th>
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<tr>
<td>A</td>
<td>Strong evidence of superb ability to fulfill the intended learning outcomes of the course at all levels of learning: description, application, evaluation and synthesis.</td>
</tr>
<tr>
<td>B</td>
<td>Strong evidence of ability to fulfill the intended learning outcomes of the course at all levels of learning: description, application, evaluation and synthesis.</td>
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<tr>
<td>C</td>
<td>Evidence of adequate ability to fulfill the intended learning outcomes of the course at low levels of learning: such as description and application, but not at high levels of learning such as evaluation and synthesis.</td>
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<tr>
<td>D</td>
<td>Evidence of basic familiarity with the subject.</td>
</tr>
<tr>
<td>F</td>
<td>Little evidence of basic familiarity with the subject.</td>
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Course Content

1 Efficiency, Market Failure and Public Goods

2. Inefficiency of equilibrium with small numbers of agents, with externalities and commons problems.
5. Theory of the second of the second best.
7. The Free Rider Problem.

2 Measurement of Welfare

1. Measuring welfare.
2. Consumer surplus as a measurement of welfare.
3. Theoretically ideal welfare measures: Compensating and equivalent variation.
4. Producer surplus.
5. Cost of living Indices.

3 Regulation and Market Structure

1. Regulation and Market Structure.
2. Monopoly and Regulation, Natural Monopoly.
3. Policy solutions to Natural Monopoly.
4. Peak load pricing.
5. Ramsey pricing.
6. Oligopoly and antitrust.
7. Collusion and cartels; Monopoly power from product differentiation; Policies towards collusion and price fixing.

8. Concentration and concentration indices; Scale Economies and industry concentration; Entry and barriers to entry; Contestability and limit pricing; Brand proliferation and entry deterrence.

9. Mergers and Restrictions: Gains to firms; Effects of mergers; Tying practices; Welfare evaluation of mergers.

10. Monopoly power, discriminatory pricing, Market control: Monopoly power; Forms of price discrimination; Predatory pricing; Approaches to predatory pricing and price discrimination; Natural monopoly; The natural monopoly pricing problem; Regulation of electric power.

4 Mechanism Design

1. Agency Incentives on public provision of goods: rent seeking, ratchet effects, median voter.

2. Dominant strategy mechanisms: Gibbard-Satterthwaite Theorem; Groves-Clarke schemes; domain restrictions.

3. Implementation and Mechanism design: Complete information environments; Monotonicity; Incomplete information environments; Incentive compatibility, individual rationality, Bayesian monotonicity.

5 Provision of Public Goods.

1. Optimal provision of a public good: Samuelson condition.

2. Lindahl equilibrium.

3. Local public goods.

6 Insurance, Moral Hazard and Adverse Selection

1. Adverse selection and market inefficiency and market failure.

2. Insurance markets, moral hazard and inefficiency.

3. Capital markets and market failure.

4. Market failure in the labour market.
7 Information and Efficiency in Capital Markets

2. Risk Aversion.
6. The presence of contagion.
7. Cross-ownership and risk.
8. Bankruptcy, risk aversion and incentives.

8 Labour Market Failures

1. Labour Market inefficiency.
2. Informational issues.

9 Sale of Public Assets

1. Auctions and the sale of spectrum.
2. Types of Auctions.

10 Income Distribution

1. Inequality.
3. Lorenz Curve.
5. Atkinsons Inequality Index.
7. Welfare and Inequality Indexes.