Public Economics
ECON 6015
Faculty of Business and Economics

Instructor: James Bergin.

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

Programme Learning Outcomes (PLOs)

On completion of this course, students should have:

PLO1: Understanding of fundamental theories and new developments in economics.

PLO2: Mastering of skills in analyzing economic data.

PLO3: Demonstration of ability to apply economic knowledge and analytical skills to address policy and business problems.

PLO4: Awareness of ethical concerns in economic issues.

PLO5: Mastering of communication skills.
Alignment of Program Learning Outcomes and Educational Aims

<table>
<thead>
<tr>
<th>Educational Aims</th>
<th>Programme Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Critical intellectual enquiry and acquiring up-to-date knowledge and research skills in a discipline / profession</td>
<td>PLO’s 1, 2, 3, 4 &amp; 5</td>
</tr>
<tr>
<td>(ii) Application of knowledge and research skills to practice or theoretical exploration, demonstrating originality and creativity</td>
<td>PLO’s 3, 4 &amp; 5</td>
</tr>
<tr>
<td>(iii) Tackling novel situations and ill-defined problems</td>
<td>PLO’s 1, 3 &amp; 4</td>
</tr>
<tr>
<td>(iv) Collaboration and communication of disciplinary knowledge to specialists and the general public</td>
<td>PLO’s 1, 3 &amp; 5</td>
</tr>
<tr>
<td>(v) Awareness of and adherence to personal and professional ethics</td>
<td>PLO 4</td>
</tr>
<tr>
<td>(vi) Enhancement of leadership and advocacy skills in a profession</td>
<td>PLO 5</td>
</tr>
</tbody>
</table>

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 develop the principles of public economics, the nature of market inefficiency, welfare measurement, market structure, provision of public goods and the measurement of inequality. Applications include the management and regulation of product and 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.

2. Graded assignments exploring issues and problems in public economics to build understanding and analytical strength.

3. In class discussion to provide perspective and familiarity with the field.

4. The course is self contained. Lecture materials distributed prior to class covering all the subject matter.

Assessment Methods. Course performance is assessed as follows:

1. Assignments: 30% of final grade

2. Final Exam: 70% of final grade
Standards for Assessment (Course Grade Descriptor).

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<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>
</tr>
<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>
</tr>
<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>
</tr>
</tbody>
</table>

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.

### Calendar 2017

<table>
<thead>
<tr>
<th>April</th>
<th>May</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td>Su Mo Tu We Th Fr Sa</td>
<td>Su Mo Tu We Th Fr Sa</td>
<td>Su Mo Tu We Th Fr Sa</td>
</tr>
<tr>
<td>1</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3</td>
</tr>
<tr>
<td>2 3 4 5 6 7 8</td>
<td>7 8 9 10 11 12 13</td>
<td>4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>9 10 11 12 13 14 15</td>
<td>14 15 16 17 18 19 20</td>
<td>11 12 13 14 15 16 17</td>
</tr>
<tr>
<td>16 17 18 19 20 21 22</td>
<td>21 22 23 24 25 26 27</td>
<td>18 19 20 21 22 23 24</td>
</tr>
<tr>
<td>23 24 25 26 27 28 29</td>
<td>28 29 30 31</td>
<td>25 26 27 28 29 30</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>July</th>
<th>August</th>
<th>September</th>
</tr>
</thead>
<tbody>
<tr>
<td>Su Mo Tu We Th Fr Sa</td>
<td>Su Mo Tu We Th Fr Sa</td>
<td>Su Mo Tu We Th Fr Sa</td>
</tr>
<tr>
<td>1</td>
<td>1 2 3 4 5</td>
<td>1 2</td>
</tr>
<tr>
<td>2 3 4 5 6 7 8</td>
<td>6 7 8 9 10 11 12</td>
<td>3 4 5 6 7 8 9</td>
</tr>
<tr>
<td>9 10 11 12 13 14 15</td>
<td>13 14 15 16 17 18 19</td>
<td>10 11 12 13 14 15 16</td>
</tr>
<tr>
<td>16 17 18 19 20 21 22</td>
<td>20 21 22 23 24 25 26</td>
<td>17 18 19 20 21 22 23</td>
</tr>
<tr>
<td>23 24 25 26 27 28 29</td>
<td>27 28 29 30 31</td>
<td>24 25 26 27 28 29 30</td>
</tr>
<tr>
<td>30 31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>