ECON90015
Managerial Economics

SUBJECT GUIDE

Semester 1, 2014

Lecturer:

Dr. Graham Richards

Department of Economics
Melbourne Business School
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Subject Outline

Introduction
Welcome to Managerial Economics.
I hope you will find the subject enjoyable and stimulating, and that you feel you are acquiring valuable new knowledge and skills. The focus of the subject is on understanding a number of fundamental concepts and theories of economics so that you can understand and explain the behaviour and decision-making of business firms. We will also examine the impact of some government decision making on business outcomes. You will learn how to apply these concepts and theories to real world problems through examples given in lectures, in tutorial exercises and in other support material. The subject provides many learning resources and opportunities for testing and clarifying your understanding. This will develop your knowledge of economics as well as your skills in analysis, problem-solving, decision making, and written and oral communication, all of which will assist you in your preparation for the assessment tasks. I am sure you will find that knowing and being able to apply these concepts and theories can also assist you in the decisions you are likely to have to make in employment in business, or in government, and in making sense of the world as a day-to-day observer of economic and business events.

Subject Aims
The overall aim of the subject is to understand and learn how to apply a toolbox of fundamental concepts and theories of economics to managerial decision making. These concepts and theories are used extensively by decision makers in business and government.

Prerequisites
There are no prerequisites for this subject.

Prescribed References
The prescribed textbook for the course is:
The book contains selected readings from various economics textbooks of this publisher and has been specifically targeted at the course requirements.
Learning Outcomes

Subject Objectives
On successful completion of this subject students should be able to:

- Describe the main objectives of the study of economics – to seek to understand the operation of the economy, and to guide decision-making by individuals, business and government;
- Explain the nature and role of theory and models in economic analysis;
- Explain the concepts of demand, supply and market equilibrium;
- Apply the model of demand and supply in a market to explain the determinants of prices and output of goods and services;
- Identify “strategic situations” in economic activity and be able to analyse and predict the outcomes of “strategic situations”;
- Identify the main characteristics of different market types, such as perfectly competitive and monopoly markets. Describe the nature of competitive behaviour in these markets, analyse and predict price and output outcomes in the different markets;
- Apply economic models of individual behaviour and markets to describe the main features of actual markets and to explain outcomes in actual markets, including prices and output levels and business performance and profitability.

Generic Skills
In this subject you will have the opportunity to improve the following generic skills:

- Apply key concepts and theories of economics to managerial decision making;
- Evaluate and synthesis of economic ideas, views and evidence;
- Access and interpret a range of economic and other information;
- Analyse real world and hypothetical problems in commerce and public policy and develop responses to them;
- Critical and strategic thinking, problem solving and decision making skills; and
- Written and oral communication, collaborative learning and team work.

Awareness Issues
At a broader level, studying this subject will increase your awareness of such issues as:

- How the economic environment impacts on organizational success, business strategy and managerial decision making.
- How the tools and techniques of economics can be used to improve managerial decision making in allocating an organization’s scarce resources.
• How the concepts and theories of economics can be used to gain a better understanding of how firms compete and organize themselves, and also provide a more secure foundation for managerial decision making.

Lecturer's Contact Details
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Room: 416, Fourth Floor, FBE Building, 111 Barry Street.
Phone: 8344-9717
Email: grahammr@unimelb.edu.au

Consultation Hours: To be advised

Email Protocol
Please note that we are only able to respond to student emails coming from a University email address. Please do not use personal email addresses such as Yahoo, Hotmail or even business email addresses. Emails from non-University email addresses may be filtered by the University’s spam filter, which means that we may not receive your email. All correspondence relating to this subject will only be sent to your University email address. Note that you must first activate your University email address before you can send or receive emails at that address. You can activate your email account at this link: http://accounts.unimelb.edu.au/.

Students should resolve substantive questions using normal tutorials and academic staff consultation hours. With this in mind, we encourage students to attend all tutorials and lectures, and to familiarise themselves with the consultation hours offered by academic staff.

Lecture and Tutorials

Lecture and Tutorial Times

Lectures – 1 x 2 hour each week

Students will choose a lecture stream and location and time from the Timetable System. The number of lecture streams will reflect the number of students taking the subject. Lecture Streams are:

Wednesday 6.15pm – 8.15pm, Copland Theatre, “The Spot”, (Basement).
Thursday 11.00am – 1.00pm, Latham Theatre, Redmond Barry Building.
Thursday 2.15pm – 4.15pm, Theatre 1, FBE Building.
Tutorials are also selected from the Timetable. There is a 1 hour tutorial each week. Tutorials begin in the second week of the semester that is, in the week commencing Monday 10 March.

Lecture Schedule

The Custom Book has a Table of Contents showing 12 Chapters. Each chapter number refers to the lecture number. So the reading from this book for lecture 3 is Chapter 3.

<table>
<thead>
<tr>
<th>Week Beginning</th>
<th>Lecture</th>
<th>Lecture Topic</th>
<th>Custom book References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday March 3</td>
<td>1</td>
<td>Introduction to key concepts</td>
<td>pp. 3 - 32</td>
</tr>
<tr>
<td>Monday March 10</td>
<td>2</td>
<td>Market forces of supply and demand</td>
<td>pp. 35 - 66</td>
</tr>
<tr>
<td>Monday March 17</td>
<td>3</td>
<td>Concept of elasticity and applications to market analysis</td>
<td>pp. 69 - 115</td>
</tr>
<tr>
<td>Monday March 24</td>
<td>4</td>
<td>Concept of the economic surplus and application to government policy</td>
<td>pp. 119 - 177</td>
</tr>
<tr>
<td>Monday March 31</td>
<td>5</td>
<td>Production costs 1: short run analysis</td>
<td>pp. 180 - 245</td>
</tr>
<tr>
<td>Monday April 7</td>
<td>6</td>
<td>Production costs 2: long run analysis</td>
<td>pp. 248 – 304</td>
</tr>
<tr>
<td>Monday April 14</td>
<td>7</td>
<td>Firms in competitive markets (Perfect competition)</td>
<td>pp. 307 – 332</td>
</tr>
<tr>
<td>Monday April 21</td>
<td></td>
<td>Non-Teaching Week</td>
<td></td>
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<tr>
<td>Monday April 28</td>
<td>8</td>
<td>Pricing with market power</td>
<td>pp. 335 -358</td>
</tr>
<tr>
<td>Date</td>
<td>Week</td>
<td>Topic</td>
<td>Pages</td>
</tr>
<tr>
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<tr>
<td>Monday May 5</td>
<td>9</td>
<td>Price targeting strategies: Price discrimination, the two-part tariff and bundling</td>
<td>pp. 361 - 411</td>
</tr>
<tr>
<td>Monday May 12</td>
<td>10</td>
<td>Oligopoly and firm rivalry Assignment due this week</td>
<td>pp. 415 - 450</td>
</tr>
<tr>
<td>Monday May 19</td>
<td>11</td>
<td>Game theory and strategic behaviour</td>
<td>pp. 453 - 494</td>
</tr>
<tr>
<td>Monday May 26</td>
<td>12</td>
<td>Externalities: social costs and benefits</td>
<td>pp. 497 - 537</td>
</tr>
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**Student Participation Requirements**

Students are expected to attend all lectures and tutorials during the semester. Tutorials are an integral and important part of the subject. They will be used both to complement and to supplement the lectures and the reading material. They are a means of improving your understanding of the material through exploring some of the concepts and their application in more depth, through solving problems, through discussing issues and asking questions. Students should prepare for each tutorial by undertaking the prescribed reading and attempting the tutorial tasks. Tutorial task sheets will be posted on the subject website in advance of the relevant tutorial. These tutorial exercises will form the basis of the tutorial activities. These tutorial tasks are based on the previous week’s lecture.

**Lecture Slides**

The power point notes for each lecture will be available on the subject homepage before the respective lecture. It may be useful for students to download and read these notes in advance of the lecture. During the lecture, modifications and additional comments may be made to the lecture notes. The lecture notes are to be considered a complement to, not a substitute for, attendance at lectures.

**Lecture recording**

Audio recordings of lectures delivered in this subject will be made available for review in the days following each lecture. Lecture recording using the EchoSystem will be
used in this subject. Audio recordings of lectures allow you to revise lectures during the semester, or to review lectures in preparation for the end of semester exam. You can access recorded lectures by clicking on the Lecture Recordings menu item in the LMS page for this subject. Many students who use the lecture recordings find it helpful to be looking at the slides as they listen.

Please note that the lecture recordings are not a substitute for attendance at lectures; rather they're designed for revision. On rare occasions the system can fail to record the lecture due to technical reasons. In such cases, the lecture recording will not be made available.

Assessment

**Assessment Overview**

<table>
<thead>
<tr>
<th>Assessment Task</th>
<th>Individual or Group</th>
<th>Hard copy or Electronic</th>
<th>Due</th>
<th>Assessment Weighting</th>
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<tr>
<td>Mid-semester exam</td>
<td>Individual</td>
<td>Hardcopy in lecture</td>
<td>In the week commencing Monday April 7 (Week 6)</td>
<td>10%</td>
</tr>
<tr>
<td>Assignment</td>
<td>Individual</td>
<td>Electronic</td>
<td>4pm on Monday May 12 (Week 10)</td>
<td>20%</td>
</tr>
<tr>
<td>End-of semester exam</td>
<td>Individual</td>
<td>Hardcopy</td>
<td></td>
<td>70%</td>
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**Mid-semester Exam**

The mid-semester test will be a multiple choice test conducted in lectures. There will be 20 multiple-choice questions (each worth equal marks) with five choices of answer. You will be required to select the best response. You will have 50 minutes to complete the test. The test will cover the first four topics of the course and will provide students with valuable feedback on their knowledge of some of the fundamental concepts and theories in economics. A practice multiple choice test will be made available on the LMS before the assessment test. More details will be announced in lectures.
**Assignment**

The assignment will be posted on the subject homepage early in the semester. You can access the Assignment by clicking on ‘Assessment’ in the navigation menu from the LMS page for the subject. The assignment is to be electronically submitted on the due date using the ‘Assignment Tool’ accessed on LMS subject website.

The word limit is 2,000 words.
In preparing assignments students should ensure that they:

a) use clear, concise expression;
b) provide coverage of major points;
c) use fluent and logical analysis, discussion, criticism or argument where appropriate (this is important because it is an indicator a student’s understanding of a subject);
d) observe the word limit where applicable (the purpose of word limits is to force precision of thought and analysis on the writer);
e) avoid using long quotations; a student’s own accurate paraphrasing is preferable;
f) acknowledge in footnotes specific ideas read from source material, even if a direct quote has not been used;
g) use quotes wisely - to summarise a point of view, to back up opinions, or as a basis for discussion; and
h) attach a bibliography at the end of your assignment.

**Exam Policy**

The Faculty requires that you are available for the entire examination period. Supplementary exams will not be provided in cases of absence during the examination period, unless the absence is due to serious illness or other serious circumstances. See the Special Consideration web site for more information:

[https://mbs.unimelb.edu.au/students/services/special_consideration](https://mbs.unimelb.edu.au/students/services/special_consideration)

**Using the Assignment Tool**

The Assignment Tool allows you to submit your assignment to your lecturer online from home or from any of the student labs on campus. During the course of the semester, you'll be asked to submit the assignment in electronic format into the Assignment Tool. You can access the Assignment Tool by clicking on Assignment Tool in the navigation menu from the LMS page for this subject.

See: [https://mbs.unimelb.edu.au/students/assessment/Assignments](https://mbs.unimelb.edu.au/students/assessment/Assignments)
**Plagiarism and Collusion**

Presenting material from other sources without full acknowledgement (referred to as plagiarism) is heavily penalised. Penalties for plagiarism can include a mark of zero for the piece of assessment or a fail grade for the subject. Plagiarism is the presentation by a student of an assignment identified as his or her own work even though it has been copied in whole or in part from another student’s work, or from any other source (e.g. published books, web-based materials or periodicals), without due acknowledgement in the text.

Collusion is the presentation by a student of an assignment as his or her own work when it is, in fact, the result (in whole or in part) of unauthorised collaboration with another person or persons. Both the student presenting the assignment and the student(s) willingly supplying unauthorised material are considered participants in the act of academic misconduct.

See university policy in relation to these matters:


The Faculty’s Centre for Excellence in Learning and Teaching (CELT) has developed a web-based ‘Academic Honesty Module’ that allows you to learn more about and test your knowledge of plagiarism and collusion.

**Penalties for Late Submission and Exceeding Word Limits**

In order to ensure equality for all students, assignments must be completed within specified time limits. Late submissions will attract a marking penalty where approval for late submission has not been given. Also assignments that exceed word limits may attract a marking penalty.

If you are unable to complete an assignment by the due date due to circumstances outside of your control, you should apply for an assignment extension in the first instance. Applications for extensions should be made to Melbourne Business School using the Assignment Extension Request form.

Please note that assignment extensions cannot be granted after the assignment due date.

Access an assignment extension request form here:

[https://mbs.unimelb.edu.au/__data/assets/pdf_file/0008/554174/MBS_Assignment_E xtension.pdf](https://mbs.unimelb.edu.au/__data/assets/pdf_file/0008/554174/MBS_Assignment_Extension.pdf)
**Special Consideration**

Students who have been significantly affected by illness or other serious circumstances during the semester may be eligible to apply for Special Consideration. The following website contains detailed information relating to who can apply for Special Consideration and the process for making an application:

https://mbs.unimelb.edu.au/students/services/special_consideration

**Referencing**

All sources used for a written piece of assessment must be referenced. This is to acknowledge that your material is not based entirely on your own ideas, but is based, in part, on the ideas, information, and evidence of others. This is desirable as you are attending University in order to learn from others. You will be required to use the APA system or Harvard System of referencing.

The Faculty’s Centre for Excellence in Learning and Teaching (CELT) has prepared a booklet for each system specifically to assist students to reference correctly. Each booklet contains many examples that will help you when preparing your assignments.

The booklets can be found here:


It is important that all material you present for assessment is referenced correctly. Material that has not been referenced correctly may be considered to be plagiarised, and as such may be penalised. We will also look for evidence that material included in the bibliography has been used in the assignment. Including references that have not been used may also result in your assignment being penalised.

**Other Subject Resources**

**Supplementary Readings**

Introductory textbooks (for those with no prior knowledge of economics)


[Students might also find it useful to refer to the companion study guide to the above textbook - *Principles of Microeconomics: Study Guide* – Judy Tennant and David R.]
Hakes. This study guide provides: an overview of the text, including learning objectives; chapter reviews and helpful hints; a variety of sample problems, and test questions and solutions; advanced critical thinking sections; and an interpretation of much of the economics analysis and concepts covered in this course.]


[This text is a collection of case studies and applications of economic concepts. Many of the topics are very relevant to managerial economics. It provides a useful revision reference for many of the areas covered in the course].

Advanced textbooks (for those with some prior knowledge of economics)


[The above two books are good references for the application of economic theories and concepts to business and management problems.]


Perloff, J. M., Smith R., and Round D. (2014), Microeconomics, Pearson Australia Group. (this is an Australian adaptation of the well-known US. textbook (above) and provides examples and illustrations which are Australian based).


[The above two books are good references for the more advanced discussion of economic theories and concepts]

**Review Questions**

Regularly throughout the semester a set of review questions will be posted to the subject website. These review questions will relate to each of the main topics of the subject and cover some of the main concepts and theories. It is an important part of learning in this subject that you should attempt these questions. Solutions for these questions will also be posted on the subject homepage.
Online Tutor

The Online Tutor (OLT) provides the scope to ask questions of a tutor online. You can access the OLT system by clicking on the “Online Tutor” tab on the LMS page for this subject.

One role for the OLT is for asking about material covered in lectures or tutorials. The other role is for answering questions about the assessment exercises. The OLT allows you to direct questions to a tutor via the LMS. The Online Tutor can be accessed 24 hours a day, 7 days a week. The tutor will attempt to answer your question within 24 hours (weekdays only). Your questions and the answers can be accessed by all students in the subject, allowing everyone to benefit from the question and answer. Importantly, your identity will not be revealed to other students. Even if you don’t want to ask a question, you can still view existing questions and answers.

The aim of the OLT is to assist you in solving any problems and help you understand key concepts and theories. It needs to be stressed that the OLT is not intended as a substitute for regular tutorials. It is therefore not a facility for providing solutions to tutorial questions, review questions, past exams or questions from the textbook.

The OLT will inform students directly if a question does not fall within the guidelines for the systems use. Those questions that show some evidence of thinking and work will be given the most thorough response. Each time you access the OLT you will be prompted for keywords that relate to the question you want to ask and the system will direct you to previously asked questions that relate to these keywords. It is very important to check whether your question has been previously asked – since the OLT will not respond to questions that have already been asked, and are hence already available for viewing.

The OLT is available to help point students in the right direction as far as what is expected in the assignment and to provide clarification on aspects of material, which has been read for the exercise that is not fully understood. Clearly the OLT will not give answers to questions that relate directly to completing the assignment.

Centre for Excellence in Learning and Teaching

The FBE Centre for Excellence in Learning and Teaching (CELT) provides services and resources to enhance your learning in Business and Economics.

Maximise your academic success by taking part in CELT programs that are intended to develop:
• Skills in research, referencing and academic writing
• Mastery of different assignment types
• Effective study techniques
• Abilities to learn effectively with your peers
• Transition to the faculty and understanding of academic expectations

The Centre also provides an extensive range of Help Sheets that can enhance your academic performance in Business and Economics. These are available online at the CELT website.

Visit the CETL site fbe.unimelb.edu.au/celt to learn more and get involved.

**Past Exams**
Relevant past final examination papers will be posted on the LMS subject home page.
Lecture Program

Lecture 1: Introduction to Key Concepts

Objectives:
Upon completion of the lecture and relevant tutorial, students should be able to:

- Have an appreciation of the subject requirements and expectations.
- Have an appreciation of the usefulness of the tools and concepts of economics for managerial decision-making
- Understand that economics is about the optimal allocation of a society’s and a firm’s scarce resources.
- Apply the cost-benefit principle and marginal reasoning to managerial decision-making.
- Identify and calculate the opportunity cost of a manager’s decisions and actions
- Discuss how incentives affect managerial decision-making

Lecture:
- Introduction to the subject and the lecture program
- Subject assessment requirements and expectations, and available subject resources
- Define managerial economics and briefly discuss its relationship to other related fields of study
- Discuss the method and approach of economics to understanding economic and business activity
- Introduction to the cost-benefit principle and marginal analysis as basis of managers making rational decisions concerning the allocation of a firm’s scarce resources.
- Discuss the concept of opportunity cost and the role of incentives.
Lecture 2: Market forces of supply and demand

Objectives:
Upon completion of the lecture and relevant tutorial, students should be able to:
- Explain the basic characteristics of a competitive market
- Explain some of the key determinants of supply and demand
- Use the supply and demand model to show how the determinants of supply and demand interact to determine market price and quantities traded
- Explain how the concepts of supply and demand can be used to analyse market conditions in which management decisions about price and allocations of resources must be made.

Lecture:
- Discuss the basic elements of a competitive market
- Present the theory of competitive markets and the supply and demand model
- Discuss the main determinants of supply and demand
- Use the supply and demand model to determine market outcomes – represented as equilibrium price and quantity traded.
- Apply comparative static analysis to show how changes in demand and supply conditions affect market outcomes
Lecture 3: Concept of elasticity and applications

Objectives:
Upon completion of the lecture and relevant tutorial, students should be able to:

- Define and measure elasticity
- Apply the concepts of price elasticity, cross price elasticity and income elasticity to market analysis
- Understand the determinants of price elasticity and how elasticity affects revenue.
- Understand how elasticity affects market outcomes and the impact of government intervention
- Understand how elasticity affects managerial decision making.

Lecture:

- Discuss the concept of the elasticity of demand and supply
- Define price elasticity of demand, cross price elasticity of demand, income elasticity of demand and the price elasticity of supply.
- Definition and calculation of the price elasticity of demand and the interpretation of elasticity 'values'
- Explain the determinants of price elasticity of demand
- Discuss various applications of the price elasticity of demand to understand and predict how changes in supply and demand conditions affect market outcomes.
- Discuss various applications of the price elasticity of demand to understand and predict how various government policies affect market outcomes.
Lecture 4: Concept of the economic surplus and applications

Objectives:
Upon completion of the lecture and relevant tutorial, students should be able to:

- Define and measure economic surplus, consumer surplus and producer surplus
- Apply the concept of economic surplus to market analysis
- Understand the concept of economic surplus as a measure of the well-being of the participants in trade
- Understand how the supply and demand model can be used to measure the benefits of trade to consumers and producers
- Apply the concept of economic surplus to assessing the impact of government intervention in the market.

Lecture:

- Define and measure the economic surplus, consumer surplus and producer surplus of a competitive market.
- Discuss concept of economic surplus as a way of measuring the benefits of trade to consumers, producers and society.
- Define and measure consumer surplus, producer surplus and the deadweight loss (loss of economic surplus)
- Application of economic surplus to measure the benefits and costs of government action
- Analyse the impact of a number of government policies on producer and consumer surplus.
Lecture 5: Production Costs 1: Short Run Analysis

Objectives:
Upon completion of the lecture and relevant tutorial, students should be able to:
- Understand the different concepts of costs that are important for managerial decision making, including opportunity costs and sunk costs.
- Define the production function and explain the difference between the short run and long run production function
- Explain the link between a firm’s production function and its total cost curves
- Derive some of the key short run cost measures for the firm and explain their key properties and importance for managerial decision making.

Lecture:
- Outline the economist’s view of the firm
- Discuss the difference between opportunity costs and sunk costs
- Define a firm’s production technology as a production function and distinguish between the short run and long run production functions.
- Derive some key productivity measures – total productivity, average productivity and marginal productivity.
- Discuss a key implication of the short run production function – the law of diminishing marginal product.
- Derive short run cost curves for the firm – average total cost, average variable cost, average fixed cost and marginal cost – and explain their key properties and relationships to each other.
Lecture 6: Production Costs 2: Long Run Analysis

Objectives:
Upon completion of the lecture and relevant tutorial, students should be able to:

- Explain the nature of costs in the long run
- Discuss the long run average cost curve and its implications for managerial resource allocation planning decisions.
- Identify and explain the importance of economies of scale and diseconomies of scale, and the concept of minimum efficient scale for managerial decision making.
- Identify and explain some of the key sources of economies of scale and diseconomies of scale
- Identify and explain the importance of economies of scope and the economies of learning for managerial decision making.

Lecture:

- Discuss the relationship between the long run and short run cost curves.
- Derive the long run average cost curve and the long run marginal cost curve and discuss their relationship to each other.
- Identify and discuss the importance of the concept of minimum efficient scale.
- Discuss how the shape of the long run average cost curve is determined by economies and diseconomies of scale.
- Discuss a number of important sources of economies and diseconomies of scale
- Define and identify some of the sources of economies of scope and economies of learning, and discuss their implications for managerial decision making.
Lecture 7: Firms in competitive markets

Objectives:

Upon completion of the lecture and relevant tutorial, students should be able to:

- Explain the concept of economic profit and its implication for managerial resource allocation decisions.
- Explain how a competitive firm makes its output decision to maximize profit.
- Derive the firm and market supply curves for a competitive market.
- Analyse the implications for a firm’s profit maximizing decisions in the short run and long run of changes in market conditions.

Lecture:

- Define economic profit and its central importance for resource allocation decisions
- Outline the main characteristics of a competitive market
- Derive the demand curve for a competitive firm
- Explain the golden rule for profit maximization: MR = MC
- Explain how managers decide when in the short run to temporarily shutdown and in the long run whether to exit or enter a market.
- Derive the short run and long run supply curves for a firm and a market
- Outline the long run equilibrium model for a competitive market
Lecture 8: Pricing with Market Power

Objectives:
Upon completion of the lecture and relevant tutorial, students should be able to:

- Explain the concept of market power as a way of analysing the ‘price setting power’ of a firm in a monopoly, monopolistic competitive or oligopolistic market.
- Explain how monopoly markets arise with reference to barriers to entry.
- Analyse how monopolies make production and pricing decisions to maximize profit.
- Analyse how a monopolist’s decisions affect the wellbeing of society, consumers and producers.
- Analyse how firms in monopolistic competitive markets make production and pricing decisions to maximize profit.
- Explain the implications of product differentiation for managerial decision making in monopolistic competitive markets.

Lecture:
- Define market power
- Outline some of the main characteristics of a monopoly and various barriers to entry
- Identify and analyse the relationship between the demand and marginal revenue curves for a monopoly
- Application of the golden rule for profit maximization to the pricing and production decisions of a monopoly
- Compare the economic efficiency and wellbeing outcomes of monopoly with a perfectly competitive market
Lecture 9: Price targeting strategies

Objectives:

Upon completion of the lecture and relevant tutorial, students should be able to:

- Explain how a firm with market power can capture more consumer surplus and increase its profits by engaging in various price targeting strategies
- Explain the three basic types or degrees of price discrimination and analyse how price discrimination affects profits and the wellbeing of consumers and producers.
- Analyse how a firm can increase its profits by bundling two related products together and selling them as a package.
- Analyse how a firm can increase its profits by setting two prices – a two-part tariff - for its product.

Lecture:

- Define price discrimination (price targeting) as a profit maximizing strategy.
- Outline the market conditions under which firms can price discriminate.
- Identify the different degrees of price discrimination
- Outline the models of first degree (perfect) price discrimination, second degree (quantity) price discrimination and third degree (multi-market) price discrimination.
- Outline the models of bundling and two-part tariffs.
Lecture 10: Oligopoly and firm rivalry

Objectives:
Upon completion of the lecture and relevant tutorial, students should be able to:

- Identify the main characteristics of oligopolistic markets (competition amongst a few sellers)
- Analyse the role that mutual interdependence and strategic behaviour plays in pricing and output decisions in oligopolistic markets.
- Discuss the tension that exists in oligopolistic markets between cooperative and non-cooperative pricing and output strategies
- Understand and apply several different models of how oligopolists determine their pricing and output decisions.

Lecture:

- Define an oligopolistic market and outline its main features.
- Outline the relationship between the recognition of mutual interdependence and strategic decision making
- Explain the incentives to cooperate (achieve a monopoly outcome) and not cooperate.
- Non cooperative outcome analysed as a Nash equilibrium (mutual best response)
- Explain several cooperative and non cooperative models of oligopoly.
Lecture 11: Game theory and strategic behaviour

Objectives:
Upon completion of the lecture and relevant tutorial, students should be able to:

- Understand some of the key elements and ideas of game theory
- Appreciate the applicability of game theory to strategic decision making in oligopolistic markets.
- Understand and apply a number of game theory tools and solution sets to a variety of competitive situations faced by oligopolistic firms.

Lecture:
- Outline the relevance of game theory to analyzing oligopolistic markets.
- Describe the main elements games, such as payoffs, strategies and equilibrium
- Discuss the difference between simultaneous games and sequential games
- Analyse a simple game - the prisoners’ dilemma game – to illustrate the concept of a Nash equilibrium
- Analyse several applications of the prisoners’ dilemma game to oligopolistic markets
- Distinguish between dominant and dominated strategies and discuss there implications for managerial decision making
- Analyse the elements of sequential games – game trees, rollback equilibrium and backward induction.
- Discuss and analyse several applications of the concepts of first mover advantage and strategic commitments.
Lecture 12: Externalities: Social costs and benefits

Objectives:
Upon completion of the lecture and relevant tutorial, students should be able to:

- Define what an externality is.
- Appreciate how the existence of externalities affects market outcomes and economic wellbeing.
- Apply a number of economic models to analyse and assess the implications of externalities for managerial decision making.
- Apply a number of remedies, including various government policies, aimed at solving the problem of externalities.

Lecture:
- Outline an externality as a market failure.
- Explain and discuss several examples of positive and negative externality effects
- Use the supply and demand model to illustrate how externalities affect market outcomes and economic efficiency
- Examine several remedies to a negative externality – such as private negotiation, production taxes, standards, emission fees and tradeable emission permits.
- Consider appropriate remedies in the situation of firms with a fixed factor production function and those with a flexible factor production function.