



**ECON0402/2216 Industrial Organization
Fall 2016**

Instructor: C.Y. Tse

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Office hours: Monday and Thursday 11:00am-12:00pm or by appointment

Class meetings: Monday 3:30pm-5:20pm and Thursday 3:30pm-4:20pm in MB113G

Teaching assistant: TBA

Lecture notes/Primary text:

Lecture notes for each class would be available for download about one week prior to class in Moodle. There are two documents for each lecture – the lecture note and the lecture slide. The contents of the two documents are identical. You only need one for studying and revision.

Reference:

1. *Industrial Organization: Theory and Practice* by Don E. Waldman and Elizabeth J. Jensen, 3rd edition, Addison Wesley. (WJ)
2. *Modern Industrial Organization* by Denis Carlton and Jeffrey Perloff, 4th edition, Harper Collins. (CP)
3. *Industrial Organization: Theory and Applications* by Oz Shy, MIT Press. (OS)

Assessment:

Tutorial participation	10%
Test (October 27, 2016)	20%
Term paper (due on December 7, 2016)	20%
Exam (assessment period: December 8-23, 2016)	50%

Test and Exam

Students who miss the test and/or exam on the scheduled dates would be marked zero. Alternative arrangements would only be granted to students with sick leave certificates issued by medical doctors. There will be NO make-up tests under any circumstances. A student who is excused from a test on medical grounds will have his/her final examination covering the weight of the test.

Problem sets and tutorials:

There will be weekly problem sets to help students better understand the materials, the solutions of which will be the subject matter of the weekly tutorial class. The problem sets will not be collected and graded, but the student's tutorial participation does constitute part of the assessment. Simply showing up or making casual remarks from time to time is NOT tutorial participation. Students are expected to fully prepare their own solutions to the problem sets and present them in tutorials.

Term paper

The term paper, an essay of about 2000 words, can be on any IO topic. But the topic must be approved by the instructor on or before November 16, 2015. More detailed instruction would be given shortly after the reading week.

Prerequisites:

ECON1001/1210 Introductory microeconomics, according to the *Regulations, Syllabus & Structure and List of Courses for the BEcon and BEcon&Fin programmes*.

However, some prior exposure to rigorous economic analysis acquired in *Microeconomic Theory* or *Microeconomic Analysis* is highly desirable, if not altogether essential. Besides, this course is a theory course and can be technical at times. Indeed, we will make use of mathematics (including *Calculus*) throughout. On the other hand, a mastery of mathematics is not enough for the student to score a high grade in the course. The exam questions almost always ask students to explain in words the economic mechanisms at work. A recitation of the formulas as answers may not receive even partial credits. In all, a lack of either decent quantitative or verbal skills can severely handicap a student's quest for a good grade in the course.

Course Description:

This course studies the pricing and output decisions of firms and the performance of the market under various market structures. Topics include theories of oligopoly; product differentiation; the effects of imperfect and asymmetric information; the examination of pricing practices such as price discrimination, tie-in selling, and resale price maintenance; collusion and anti-competitive behaviours, and public policies related to the promotion or restriction of competition.

Course Objectives:

1. To understand how firms interact with each other in markets.
2. To learn how markets may be efficient and inefficient.
3. To learn to evaluate what public policies will best preserve and enhance *competition* as a means to promote the free market to serve the public interest.

Alignment of faculty's overall goals and course intended learning objectives:

Course Learning Outcomes	Aligned Faculty Goals
CLO1. Be able to intelligently speculate the motives of real world pricing and other decisions of firms.	Goal# 1, 2, 3, 5
CLO2. Be able to understand the causes and consequences of market failures.	Goal# 1, 2, 3, 5
CLO3. Be able to form intelligent opinions on how anti-competition law may or may not improve market performance.	Goal# 1, 2, 3, 4, 5
CLO4. Be ready for more advanced studies in Industrial Economics.	Goal# 2

Goal 1 - Acquisition and internalization of knowledge of the programme discipline
 Goal 2 - Application and integration of knowledge
 Goal 3 - Inculcating professionalism and leadership
 Goal 4 - Developing global outlook
 Goal 5 - Mastering communication skills

Course Teaching and Learning Activities (TLA):

Activities	Expected contact hours	Study load (% of study)
T&L1. Lecture	36	26
T&L2. Tutorial	9	6
T&L3. Weekly problem set	18	13
T&L4. Term paper	22	16
T&L5. Readings and revisions	55	39
Total	140	100

Alignment Among Course Intended Learning Outcome and Teaching and Learning Activities

Learning Outcome	Teaching and learning activity (TLA)
CILO1	TLA1, TLA2, TLA3, TLA4, TLA5
CILO2	TLA1, TLA2, TLA3, TLA4, TLA5
CILO3	TLA1, TLA2, TLA3, TLA4, TLA5
CILO4	TLA1, TLA2, TLA3, TLA4, TLA5

Assessment Methods	Weight	Aligned Course Learning Outcomes
A1. Tutorial participation	10%	CLO1-4
A2. Test	20%	CLO1-4
A3. Term paper	20%	CLO1-4
A4. Exam	50%	CLO1-4

Standards for Assessment

Course Grade Descriptors		
Grade	Grade Definition	Description
A+, A, A-	High distinction	Strong evidence of superb ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
B+, B, B-	Distinction	Strong evidence of the ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
C+, C, C-	Credit pass	Evidence of adequate ability to fulfill the intended learning outcomes of the course at low levels of learning such as describe and apply but not at high levels of learning such as evaluate and synthesis
D	Pass	Evidence of basic familiarity with the subject.
F	Fail	Little evidence of basic familiarity with the subject.

Assessment Rubrics for Tutorial Participation, Term paper and Midterm Examination and Final Exam are the same as in course grade descriptors.

Academic Conduct

The University Regulations on academic dishonesty - behaviors in which a deliberately fraudulent misrepresentation is employed in an attempt to gain undeserved intellectual credit, either for oneself or for another will be strictly enforced. The Board of Examiners may impose a penalty in relation to the seriousness of the offence and may report the candidate to the Senate, where there is *prima facie* evidence of an intention to deceive and where sanctions beyond those imposed by the BoE might be invoked.

Topics and lectures (Tentative schedule)

1. Perfect Competition (1.5 weeks)

- The theory of perfect competition
- Upward sloping market supply curve
- The efficiency of perfect competition
- Sunk cost, entry, and exit
- Long run supply curve with sunk cost

2. Monopoly (1.5 weeks)

- The theory of monopoly
- Sources of monopoly power – increasing returns to scale
- Sources of monopoly power – costly search
- Equilibrium with costly search and price dispersion
- The inefficiency of monopoly
- Monopoly distortion in general equilibrium

3. Oligopoly (3 weeks)

- Introduction to oligopoly theory – Cournot duopoly
- The intensity of competition in Cournot oligopoly
- Entry in Cournot oligopoly

Readings*

S1.1 (WJ)

S3.1-3.2 (WJ)

S3.3-3.6 (WJ)

pp.99-105 (CP)

pp.452-470 (CP)

S7.1-7.3 (WJ)

C8 (WJ)

- Bertrand oligopoly
 - Market structure and a firm's elasticity of demand
 - Introduction to dynamic oligopoly theory
 - Stackelberg model of oligopoly
4. Anti-competitive behavior – Cartel and tacit collusion (1.5 weeks) C5 (CP)
S7.4-7.5 (WJ)
C8 (WJ)
- Cartel
 - Repeated game
 - Tacit collusion
 - The Folk Theorem, the credibility of punishment, and price war
5. Ant-competitive behavior – predatory and limit pricing (1 week) C11 (WJ)
S12.1 (WJ)
- Predatory pricing
 - Limit pricing – the advantage of incumbency
 - Capacity expansion to deter entry
6. Product differentiation & Monopolistic competition (1.5 weeks) S13.1-13.2 (WJ)
- Product differentiation and price competition
 - Spatial competition
 - Monopolistic competition
 - Vertical product differentiation
7. Pricing (1 week) S15.1-15.2 (WJ)
S5.5 (OS)
- First degree price discrimination
 - Third degree price discrimination
 - Quantity discount and quality choice
 - Product bundling to price discriminate
 - Durable good monopoly and the Coase conjecture
8. Regulations of industry (1 week) S17.1, 17.3 (WJ)
- The effects of rate of return regulations

*Additional references will be given in selected lectures.

Classroom etiquette

1. Please switch your cell phone to silent mode if you need to keep it on at all.
2. If you need to answer a call during class, quietly walk out of the classroom before you do so. When you finish, please leave and do not come back in again.
3. If you are late for more than 10 minutes, please do not bother to show up. Your entry in the middle of the class is a nuisance to everybody.
4. Unless for emergency, please do not leave the classroom before the class is over. Your doing so constitutes outright disrespect for the instructor.
5. Please do not come to the classroom to mainly surf the net during class.

amended on 28/7/2016