Course Outline

EE481 Industrial Economics (Section 046401)

Semester 1/2022 (August 8 – November 26, 2022)

Number of credits: 3 credits (3-0-6)

Instructor: **Asst. Prof. Dr. Pornthep Benyaapikul**
Office: Room 510, 5th Floor, Faculty of Economics
Email: pornthep@econ.tu.ac.th

Class Schedule: Wednesday and Friday, 14.00-15.30 hrs.
Class Room: Room 303, Faculty of Economics
Enrollment key #BE Moodle: 0279 (http://bemoodle.econ.tu.ac.th/)

Course Description:

This course studies behaviors of firms under imperfectly competitive markets. It covers the structure–conduct–performance (SCP) paradigm, which examines the relationship among market structure, firms' conducts and their performance. It also covers firms' decision on operation, resource allocation, as well as firm's strategic actions. Price theory and game theory will be used to analyze issues such as pricing, research and development, advertising, and firms' decision under imperfect information

Prerequisites: EE311

Course Objectives:

The course would study behaviors of firms in imperfectly competitive markets. First, the class will start with the methodology used in this study such as S-C-P model and game theory. Then firm strategies in oligopoly market will be examined. The firm strategies would include both pricing and non-pricing strategies. In addition, some regulatory tools to prevent abuse of market-power and promote market efficiency will be covered.

Teaching Materials:

Required Textbooks:

1. Carlton and Perloff, Modern Industrial Organization, 4th edition, Addison-Wesley, 2005. **** Main Textbook****
2. Church and Ware, Industrial Organization: A Strategic Approach, McGraw-Hill, 2000. ** **Main Textbook for some chapters** ** (available online)
3. Rasmusen, Games & Information, 3rd. Edition, Backwell, 2001.
4. Tirole, Industrial Organization, The MIT Press, 1989.

Teaching Plan:

Week	**Topics**	
1	Overview	CP1-2
2	Market and Dominant Firm	CP4
3	Review Game Theory	Rasmusen, Osbourne
4	Oligopoly Models: Cournot and Stackelberg	CP5
5	Oligopoly Models: Bertrand and Cartel	CP6
6	Pricing Strategies: Price Discrimination	CP9
7	Pricing Strategies: Two-part Tariff	
	Midterm examination	
8	Pricing Strategies: Predatory Pricing and Limit Pricing	
9	Production Differentiation	CP7
10	Strategic behaviour	CP13
11	Vertical Integration and Vertical restriction	CP12
12	Advertising	CP 14
13	R&D and Intellectual Property Rights Protection	CP16
14	Competition Policies: Antitrust	CP19-20
15	Class Wrap-Up, Presentation	

Evaluation Methods

Homework 30 %

Mid-term Examination 30 % **(Friday, September 30, 2022; 3.00 – 5.00 PM)**

Final Examination 40 % **(Thursday, December 15, 2022; 09.00 AM - noon)**

Class Policy:

Late homework is not acceptable.

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Learning Goals
●	1.1 Students demonstrate integrity.
○	1.2 Students prioritize social and public benefits over personal ones.
●	1.3 Students are punctual and comply with the code of conduct of the institution and society at large.
○	1.4 Students are responsible and accountable to society, the nation, and the subject of economics.
○	1.5 Students realize the cultural and environmental value of the sustenainable society.

2. Knowledge

Applicability	Learning Goals
●	2.1 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.2 Students know and understand Thai and global economic structure, and the importance of major international economic events.
○	2.3 Students know and understand instruments of economic analysis.
●	2.4 Students know and understand applied fields in economics, including monetary, public, international, business, natural resource and environmental, industrial, agricultural, cooperative, political, developmental, and entrepreneurial economics as well as agribusiness.
○	2.5 Students are informed about related fields including sociology, business administration, education, law policy, and science.

3. Intellectual Development

Applicability	Learning Goals

●	3.1 Students have developed individual critical thinking.
●	3.2 Students are sufficiently trained in research skills.
●	3.3 Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand causes of current economic problems in Thailand. Based on analsyis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.

4. Interpersonal Skills and Responsibilities

Applicability	Learning Goals
●	4.1 Students are responsible for assigned tasks and work in groups effectively.
●	4.2 Students have problem-solving skills.
○	4.3 Students show leadership skills and team spirit.
●	4.4 Students are always improving themselves.
○	4.5 Students have good interpersonal skills, adapting and working under different conditions.

5. Quantitative Analysis, Communication and Information Technology

Applicability	Learning Goals
○	5.1 Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.
○	5.2 Students communicate effectively and select appropriate presentation methods.
○	5.3 Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.

Topics:

1. Introduction and Theory

Overview	**CP 1** or CW 1
The Firm and Cost / Theory of the Firm	**CP 2** or CW 3

2. Dominant Firm

Dominant Firm	**CP 4**

**You should have learned about monopoly already from EE311.*

3. Game Theory

Static Games	**R 1, 2, 3**
Dynamic Games	**R 4, 5, 6**

4. Oligopoly

Cartel	**CP 5**
Cournot model	**CP 6** or CW 8.2
Bertrand model	**CP 6** or CW 8.3
Multi-period Models of Oligopoly	**CP 6** or CW 10
Industry Structure and Performance	**CP 8**

5. Business Practices Strategies and Conduct

Price Discrimination	**CP 9**, CP 10
Strategic Behavior	**CP 11**
Vertical Integration and Vertical Restrictions	**CP 12**

6. Government Policies

Antitrust	**CP 19** or CW 19
Regulation	**CP 20** or CW 24

7. Other Issues (if time allows, we will study some of these topics)

Production Differentiation	**CP 7** or CW 11
Advertising	**CP 14** or CW 17
Information	**CP 13**
R&D and Patent	**CP 16** or CW 18

Remarks:

- **Mid-Term Examination** **(Friday, September 30, 2022; 3.00 – 5.00 PM)**
- **Final Examination** **(Thursday, December 15, 2022; 09.00 AM - noon)**

ACADEMIC CALENDAR & HOLIDAY
SEMESTER 1/2022

Semester 1/2022 (August 8 – November 26, 2022)	
Registration at REG TU (*ID.62-64)	July 11 - 14, 2022
Registration at REG TU (*ID.65)	July 26, 2022
Tuition Fee Payment Period (Via TU Greats App)	July 15 - 17, 2022
Classes Begin	August 8, 2022
Add-drop period	August 8 – 21, 2022 *(from 9.00 AM of August 8 to 10.30 PM of August 21)*
*H.M. Queen Sirikit The Queen Mother's Birthday**	*August 12, 2022*
Tuition Fee Payment Period (Via TU Greats App)	August 22 – 24, 2022 *(9 AM - 10.30 PM)*
Mid-term Examination Period	September 25 – October 2, 2022
Withdrawal period with "W" on record	August 26 – October 16, 2022 *(from 9.00 AM of August 26 to 10.30 PM of October 16)*
*H.M. King Bhumibol Adulyadej The Great Memorial Day**	*October 13, 2022*
*King Chulalongkorn's Day**	*October 23, 2022*
*Substitution for King Chulalongkorn's Day**	*October 24, 2022*
Last day of class for Semester 2/2021	November 26, 2022
Final exam period	November 28 – 30, December 1 – 4, 6 – 9, 13 – 16, 2022
*H.M. King Bhumibol Adulyadej The Great's Birthday**	*December 5, 2022*
*Constitution Day**	*December 10, 2022*
*Substitution for Constitution Day**	*December 12, 2022*
Submitting Forms for Degree Conferral	August 8 – 21, 2022

Remark * Holiday, No classes during this period