COURSE CONTENT

| Course Coordinator | Jonathan Tan |
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| Course Code | HE3031 |
| Course Title | Industrial Organization and Business Strategies |
| Pre-requisites | HE1001 Microeconomics I/ HE9091 Principles of Economics/ HE5091 Principles of Economics/ AB0901 Principles Of Economics: A Singapore Perspective |
| No of AUs | 3 |
| Contact Hours | 39 hours (2 hours lecture & 1 hour tutorial week) |

Course Aims

In this course, you will learn how to describe and analyze how the structure of markets, determine market outcomes through the conduct of firms and strategic interactions between businesses. Our analysis is conducted, primarily but not exclusively, from the perspectives of microeconomic principles and game theory. Theory is in turn complemented by case-based, empirical, or experimental evidence. The course applies economic reasoning to the analysis of topics such as market clearing, price discrimination, oligopolistic competition, collusion, competitive strategies, and product differentiation. It is designed for students with a background in intermediate economics and a passion for applying fundamental knowledge to real business problems in rigorous and relevant ways. It is suitable for students who wish to pursue further studies in economics or a career in business, consulting, investment banking, or government.

Intended Learning Outcomes (ILO)

By the end of this course, you should be able to:

- 1. Use available information and suitable assumptions to set up business scenarios as economic models.
- 2. Analyze business strategies, functions, and phenomena, using numeracy and quantitative skills as well as microeconomic principles and game theory.
- 3. Communicate economic reasoning, in speech and writing, on diverse industrial organization contexts.

Course Content

- 1. Market structure
- 2. Market clearing
- 3. Market power and price discrimination
- 4. Equilibrium analysis in game theory
- 5. Static oligopolistic competition
- 6. Dynamic oligopolistic competition
- 7. Repeated oligopolistic competition
- 8. Market contestability and entry
- 9. Predation and limit pricing
- 10. Product differentiation
- 11. Vertical integration and restrictions
- 12. Antitrust laws and policies

Assessment (includes both continuous and summative assessment)

Continuous Assessments:100%Total:100%

Reading and References

Carlton, Dennis W., Perloff, Jeffrey M. (2005) *Modern Industrial Organization*. 4th ed., London: Pearson Addison Wesley. **[CP]**

Tirole, Jean (1988) The Theory of Industrial Organization. Cambridge, Mass.: MIT Press. [JT]

Course Instructors

| Instructor | Office Location | Email | |
|--------------|-----------------|------------------|--|
| Jonathan Tan | SHHK 04-78 | j.tan@ntu.edu.sg | |

Planned Weekly Schedule

| 1 | Market structure | 1, 2, 3 | CP 8, 17 | | |
|-------------|---------------------------------------|---------|-----------------------------|--|--|
| 2 | Market power | | CP 9-10 | | |
| 3 | Primer on game theory | | JT 11 | | |
| 4 | Static oligopolistic competition | | CP 6, JT 5 | | |
| 5 | Dynamic oligopolistic competition | | CP 6, JT 8 – CA1 | | |
| 6 | Business strategies I | 1, 2, 3 | CP 11, JT 8 | | |
| 7 | Business strategies II | 1, 2, 3 | CP 11, JT 8 | | |
| Recess Week | | | | | |
| 8 | Repeated games | 1, 2, 3 | CP 6, 11, JT 6 – CA2 | | |
| 9 | Collusion and reputation | 1, 2, 3 | CP 5, 11, JT 6 | | |
| 10 | Product differentiation I | 1, 2, 3 | CP 7, JT 7 | | |
| 11 | Product differentiation II | 1, 2, 3 | CP 7, JT 7 | | |
| 12 | Vertical integration and restrictions | 1, 2, 3 | CP 12 | | |
| 13 | Antitrust laws and policies | 1, 2, 3 | CP 19 – CA3 | | |