**The Chinese University of Hong Kong**
**1st Term, 2017-2018**
**ECON 5011A Microeconomic Theory**
**Teacher: Wong Kam-Chau**
**Off.: ELB 935; Tel.: 3943-8200**
**E-mail: kamchauwong@cuhk.edu.hk**

<center>**Syllabus**</center>

**Course Description.** This course provides an exposition of advanced microeconomic theory. Topics include preference and utility, consumer demand, production, expected utility, normal form game, extensive form game, externality, public good, oligopoly, and general equilibrium. Essential mathematical tools such as sequence, compact set, separating hyperplane, and fixed point will also be discussed.

Students are assumed to be familiar with basic differentiable calculus (as discussed in [C]).

**Learning Outcomes.** After taking this course, students should be familiar with basic results in advanced microeconomic theory. They should also be able to read papers in academic journals.

**Readings.** Teaching materials are mainly based on the textbook [M], with other supplementary readings.

**Course Schedule.** Discussion topics are scheduled as follows:

**Weeks 1-2.** Proof Methods, Preference and Utility ([M], Ch.1,3)

**Weeks 3-5.** Consumer Demand ([M], Ch.2,3)

**Week 6.** Production ([M], Ch.5)

**Week 7.** Mid-term

**Week 8.** Expected Utility and Risk Dominance ([M], Ch.6)

**Week 9.** Normal Form Game ([M], Ch.8)

**Week 10.** Extensive Form Game ([M], Ch.7,9)

**Week 11.** Market Power and Oligopoly ([M], Ch.12)

**Week 12.** Partial Equilibrium ([M], Ch.10),
      Externality and Public Good ([M], 11)

**Week 13.** General Equilibrium ([M], Ch.15-17)

**Week 14.** Final Exam


**Grade.**   The course grade is counted as follows:

  Mid-term       50%

  Final          50%


**Academic Honesty.** Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at http://www.cuhk.edu.hk/policy/academichonesty/.


# References

[B]  Bartle, R. G., and Sherbert, D. R. (2000). *Introduction to Real Analysis,* 3rd edition. John Wiley & Sons, Inc., New York.

[C]  Chiang, A. C., and Wainwright, K. (2005). *Fundamental Methods of Mathematical Economics,* 4th edition. McGraw Hill Companies, Inc., New York.

[M]  Mas-Colell, A., Whintson, M. D., and Green, J. (1995). *Microeconomic Theory.* Oxford University Press, Inc., New York.

[R]  Rudin, W. (1976). *Principles of Mathematical Analysis,* 3rd edition. McGraw-Hill, New York.

[V]  Varian, H. (1984). *Microeconomic Analysis,* 2nd edition. W.W. Norton & Company, New York.