

Microeconomic Theory

ECON5010

CUHK

Fall 2023

1. Course information

1.1 Location and timing

Lecture: Wed 9:30am-12:15pm, from 6 Sept. to 29 Nov.

Venue: Room 305 of Wu Ho Man Yuen Building

Office Hour: Friday: 2:30-4:00pm or by appointment

1.2. Instructor

Prof. Rongzhu Ke

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1.3. Evaluation

There are five problem sets, a midterm and a final exam.

Grading: problem sets 10%, midterm 25% (lectures 1-5), and final 65% (whole course). The midterm will be in-class; details will be announced at least two weeks in advance. The final exam date and location will be announced by the University.

1.4 Academic honesty and plagiarism

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/>.

With each assignment, students will be required to submit a signed declaration that they are aware of these policies, regulations, guidelines and procedures. For group projects, all students of the same group should be asked to sign the declaration. For assignments in the form of a computer-generated document that is principally text-based and submitted via VeriGuide, the statement, in the form of a receipt, will be issued by the system upon students' uploading of the soft copy of the assignment. Assignments without the receipt will not be graded by teachers. Only the final version of the assignment should be submitted via VeriGuide.

2. Goals of the course

This course attempts to provide you with a solid grounding in the fundamentals of microeconomic theory at the MPhil and PhD levels. Proofs are emphasized. The course consists of four components that will be covered, while the fifth topic is optional:

1. Choice theory and classical consumer theory
2. Producer theory
3. Choice under uncertainty
4. General equilibrium theory
5. Externality and other topics

3. References [Text Books]

1. *Lecture Notes in Microeconomic Theory* [R], 2006, Ariel Rubinstein, Princeton University Press (Free downloads from Rubinstein's webpage)

2. *Microeconomic Theory* [MWG], 1995, Mas- Colell, Whinston, and Green, Oxford University Press
3. *Microeconomic Foundations 1: Choice and Competitive Markets* [K], 2013, David Kreps, Princeton University Press
4. *Notes on the Theory of Choice* [K2], 1988, by David Kreps, Westview Press

4. Tentative Course Outline and Additional Readings

Note: Numbers in square brackets refer to readings at the end. Topics may be adjusted slightly depending on the pace of coverage and timing of the midterm exam.

1. Choice, preferences, and utility (lectures 1-3 [R], Ch. 3A-C [MWG])
2. The consumer problem: convex preferences, Marshallian demand, (Ch. 2 A-E, Ch. 3 D [MWG], lecture 4 [R], Ch 3 [K])
3. Revealed preferences and Afriat's theorem (Ch. 4 [K], [6], [7])
4. Expenditure minimization, Hicksian demand, duality, and Slutsky decomposition (Ch. 3. E, F, G [MGW], lecture 6 [R], Ch 10.1-6 [K])
5. Classical and behavioral welfare economics (Ch. 3 I [MWG], [2], [3], [4], [5], [14])
6. Choice under uncertainty: the independence axiom, expected utility, and the Allais paradox (lecture 8 [R], Ch. 6 A-C [MWG], Ch.5 [K])
7. Mid-term (Lecture 1-5)
8. Utility for money and risk aversion (Lecture 9 [R], Ch. 6 [K])
9. First and second order stochastic dominance (Ch. 6.D [MWG])
10. Measuring risk preferences, Rabin's calibration theorem, reference point and loss aversion ([1], [12], [13], [10]. [11])

11. Introduction to general equilibrium (Ch. 15 [MWG], Ch. 14 1-3 [K])
12. First and second welfare theorems, convergence to the core (Ch. 16 A-D, Ch 18 A,B [MWG], Ch. 15 [K])
13. Existence of general equilibrium (Ch. 17 A-C, E [MWG], Ch 14.4 [K])

References

- [1] Barseghyan, Levon, Francesca Molinari, and Ted O'Donoghue, 2018, Estimating Risk Preferences in the Field, *Journal of Economic Literature*, 56:501-564
- [2] Bernheim, Douglas, 2009, Behavioral Welfare Economics, *Journal of European Economic Association* 7:267-319
- [3] Bernheim, Douglas, Andrey Fradkin and Igor Popov, The Welfare Economics of Default Options in 401(k) Plans, *American Economic Review*, 105:2798-2837
- [4] Bernheim, Douglas and Antonio Rangel, 2008, Beyond Revealed Preference: Choice Theoretic Foundations for Behavioral Welfare Economics, *Quarterly Journal of Economics* 51-103
- [5] Chetty, Looney, and Kroft, 2009, Salience and Taxation: Theory and Evidence, *American Economic Review* 99:4 1145-1177
- [6] Echenique, Lee and Shum, 2012, Revealed Preference Tests Using Supermarket Data: The Money, Pump, *Journal of Political Economy*
- [7] Fostel, Scarf and Todd, 2004, Two new proofs of Afriat's theorem, *Economic Theory* 24:211-219
- [8] Harbaugh, Karuse, and Berry, 2001, GARP for Kids, *American Economic Review*, vol 91:1539-1545
- [9] Jensen, Robert and Nolan Miller, 2008, Giffen Behavior and Subsistence Consumption, *American Economic Review*, September
- [10] Koszegi and Rabin, A Model of Reference-Dependent Preferences, *Quarterly Journal of Economics*, 121:4
- [11] Koszegi and Rabin, 2007, Reference-Dependent Risk Attitudes, *American Economic Review*
- [12] Koszegi and Rabin, 2008, Choice, Situations and Happiness, *Journal of Public Economics*, 1821-1832

- [13] Rabin, Matthew, 2000, Risk aversion and expected-utility theory: A calibration theorem, *Econometrica* 68, pp. 1281-1292
- [14] Rabin and Thaler, 2001, .Risk Aversion,.,*Journal of Economic Perspectives*, pp.219-232
- [15] Salant, Yuval and Ariel Rubinstein, 2008, (A,f): Choice with Frames, , *Review of Economic Studies*
- [16] Schildberg-Hörisch, Hannah , 2018, Are Risk Preferences Stable? *Journal of Economic Perspectives*, 32:135-154