MICROECONOMIC THEORY I, PART 1

MARCIN PESKI

This is the first of four parts of the Ph.D microeconomics sequence. We will cover the basic introduction to the consumer theory, firm theory, methods of comparative statics and some decision theory under uncertainty.

The grade will come from an in-class midterm on 23rd October. The class will meet on Tuesdays and Thursdays, 9-11am. I will have the office hours on Monday 9-11, or by appointment

Below, you can find a more detailed description of the topics together with required readings. The assignment of topics to particular days is very tentative and it may move as we go along.

Date	**Topics**	**Readings**
11.09	**Choices and preferences**. Choice correspondence. Weak Axiom of Revealed Preference. Preference representation.	MWG 1
13.09	**Utility theory and classical demand theory**. Consumption space. Utility representation. Budget sets. Utility maximization. Walrasian demand correspondence and its properties. Price and wealth effects.	MWG 3.A-D, 2
18.09	**Classical demand theory II**. Kuhn-Tucker conditions. Properties of indirect utility. Expenditure minimization. Properties of Hicksian demand and expenditure function. Envelope Theorems. Shepherd's Lemma and Roy's identity. Slutsky equation. The Law of Compensated Demand.	MWG 3D-3G

Date	Topics	Readings
20.09	**Classical demand theory III**. Aggregate demand. Integrability. Welfare comparisons.	MWG 3H, 4A-B, 3I
25.09	**Firm Theory**. Production sets. Profit maximization and cost minimization. Properties of Aggregate supply. Le Chatelier Principle.	MWG 5
27.09	**Comparative statics I**. Implicit Function Theorem. Robust comparative statics. Single-crossing condition. Increasing differences condition.	lecture notes
2.10	**Comparative statics II**. Multivariate comparative statics. Supermodularity.	lecture notes
4.10	**Introduction to choice under uncertainty**. Examples. State-dependent and state-independent expected utility. Subjective and objective uncertainty. Acts. Axioms of the Anscombe-Aumann Theory.	lecture notes, MWG 6.A
9.10	**Expected utility theory I**: The (Anscombe-Aumann State-Dependent) Expected Uitlity Representation Theorem.	lecture notes, MWG 6.B, 6.F
11.10	**Expected utility theory II.** State-independent utilty. Non-expected utility theories. Allais, Machina, and Ellsberg paradoxes. Updating.	lecture notes, MWG 6.B
16.10	**Expected utility theory III**: Risk-aversion. Certainty equivalent. First and second-order stochastic dominance.	MWG 6.C-D
18.10	**Monotone statics under uncertainty**. Stochastic dominance ordering. Comparison of lotteries. Marginal likelihood ration property.	lecture notes
23.10	Midterm	