Doctorat HEC 2006/2007

Microeconomics (A. Bogolmonaia and H. Moulin, HEC-INSEFI and Rice U.)

The course is an introduction to consumption, production and equilibrium theory.


List of topics:

1. Consumer choice
   preference relations; choice functions; demand functions the weak axiom of revealed preferences. (MC Ch. 1, 2)

2. Demand theory (1)
   Utility maximization and demand functions; duality theory: indirect utility, expenditure functions. (MC Ch. 2, 3)

3. Demand theory (2)
   integrability and revealed preferences; money metric utilities; representative consumer; evaluation of economic change. (MC Ch. 3, 4)

4. Choice under uncertainty
   expected utility; von Neuman-Morgenstern axiomatization; risk aversion; Allais and Ellsberg paradoxes. (MC Ch. 6)

5. Production
   profit maximization, cost maximization; convexity and returns to scale; efficient production; aggregation of supply. (MC Ch. 5).

6. General equilibrium
   Edgeworth box; production economies; general definition and examples. (MC Ch. 15 and 17.B)

7. Existence and welfare properties
   Existence of a Walrasian equilibrium; Pareto optimality; first and second fundamental theorems. (MC Ch. 17.C and Ch. 16)

8. Game theoretical foundations
   core stability; the Debreu Scarf convergence theorem; market games. (MC Ch. 18.A,B,C)

9. Welfare economics
   aggregation of preferences and Arrow's impossibility theorem; collective utility functions: egalitarian, utilitarian and Nash. (MC Ch. 21 and 22.B, C, D).