## Universidad Carlos III de Madrid Master in Economic Analysis Microeconomics II (2015-16)

Professor: José Luis Ferreira

The course will involve a total of 52 hours (4 hours per week times 13 weeks), which are divided between 39 hours of lectures and 13 hours of practical classes. A background of Microeconomics I is necessary, but most of all the student needs to have an appreciation for mathematical modeling in the social sciences.

Textbook: Mas-Colell, Whinston and Green. Microeconomic Theory, Oxford University Press. (MC-W)

1. Risk and uncertainty. Chapter 6 in MC-W. (2 weeks)

- 1.1 Expected Utility Theory
- 1.2 Attitudes towards risk
- 1.3 Risk comparison
- 1.4 State dependent utility

2. Game theory (no Bayes). Chapters 7-9 in MC-W. (5 weeks)

- 2.1 Static games. Nash equilibrium
- 2.2 Dynamic games. Subgame perfect equilibrium
- 2.3 Refinements of equilibria
- 2.4 Repeated games

3. Market failure Chapter 11 in MC-W. (3 weeks)

- 3.1 Bilateral externalities
- 3.2 Public goods
- 3.3 Lindahl prices, Clark-Groves mechanism
- 3.4 Multilateral externalities

4. Imperfect competition. Chapter 12 in MC-W. (3 weeks)

- 4.1 Monopoly
- 4.2 Duopoly
- 4.3 Product differentiation
- 4.3 Entry
- 4.4 Repetition