

**MA Economics (CITD)**

**Micro Economics II**

**Winter Semester 2015-16**

*Course Instructor: Sangeeta Bansal*

**I Choice Under Uncertainty**

Expected Utility Theorem

Monetary Lottery and Risk Aversion

Arrow Pratt Measure of Absolute Risk Aversion

Applications: Insurance and portfolio choice

Comparing risk: First order and second order stochastic dominance

(Jehle and Reny; Mas-Colell, Whinston and Green)

**II Non-Cooperative Game Theory**

1. Representation of a game: normal form, extensive form

2. Static Games of Complete Information

Prediction of an outcome:

Dominant strategies; Iterated elimination of dominant strategies;

Nash equilibrium: pure strategies, mixed strategies, existence

3. Dynamic Games of Complete Information

Backward induction and subgame perfect equilibrium

Sequential bargaining - Rubinstein model

4. Repeated games: finite and infinite

5. Static Games of Incomplete Information

Bayesian games and Bayesian Nash equilibrium

**III Industrial Organization**

Monopoly: quantity distortion, Lerner index, perfect discrimination, two part tariff, quality distortion (Tirole ch 1, ch 3, ch 5)

Duopoly: Bertrand paradox, Cournot analysis

Entry, accommodation and exit:

No. of firms endogenous; Bain Sylos Postulate,

Dixit Spence model, limit pricing

Product differentiation and product selection

#### **IV Asymmetry of Information**

Principal agent models

Adverse selection

Moral hazard

#### **Suggested Readings**

Jehle and Reny, Advanced Micro-economic Theory

Gibbons, R (1992), A Primer in Game Theory.

Mas-Colell, Whinston and Green (1995), Microeconomic Theory, The MIT Press.

Kreps, D (1990) A Course in Microeconomic Theory, Princeton University Press.

Fudenberg and Tirole (1991), Game Theory, The MIT Press.

Dixit and Skeath (2004), Games of Strategy, Norton and Company.

Osborne and Rubinstein (1994), A course in Game Theory, The MIT Press.

Osborne (2003), An introduction to Game Theory, Oxford University Press.

Tirole (1988), Industrial Organization, The MIT Press.

Oz Shy (1996), Industrial Organization, The MIT Press.

Belleflamme, Paul and Martin Peitz (2010), Industrial Organization Markets and Strategies, Cambridge University Press.

#### **Grading**

Grading will be on the basis of a mid-sem and an end-sem exam.