Boston College

Department of Economics

Microeconomics III - Decision and Game Theory

EC 702 - Autumn 1996

Professor W. Bentley MacLeod

Carney Hall 246

Office Hours: Tuesdays 2:30pm - 4:00pm or by appointment.

Evaluation:

1. 30% - Midterm Exam: October 17, 1996.

2. 20% - Problem Sets - assigned every week.

3. 50% - Final Exam.

Reading List

Books: (On reserve in O'Neil library)

Savage, Leonard, 1972, *The Foundations of Statistics*, Dover Publications, New York. This is abbreviated S.

Mas-Colell, A., M. Whinston and J. Green, 1995, *Microeconomic Theory*, Oxford University Press. This is abbreviated MWG.

Diamond, P. and M. Rothschild, (editors) 1989, *Uncertainty in Economics*, Academic Press. This is abbreviated DR.

Fudenberg, Drew and Jean Tirole, 1991, *Game Theory*, The MIT Press, Cambridge, MA. This is abbreviated DT.

Myerson, Roger B., 1991, *Game Theory*, Harvard University Press, Cambridge, MA. This is abbreviated M.

1. Choice under Uncertainty

- 1. S chapters 1- 5.
- 2. MWG chapter 6.
- 3. DR chapters 3, 4.
- 4. M chapter 1.
- 5. Machina, M., 1987, "Choice under Uncertainty: Problems Solved and Unsolved," *The Journal of Economic Perspectives*, 1, 121-154.

2. Multi-person decision theory: The definition of a game

- 1. MWG chapter 7.
- 2. FT chapter 1.1
- 3. M chapter 2.

3. Nash Equilibrium: Definition and existence

- 1. MWG chapter 8.
- 2. FT Sections 1.2, 1.3, 2.
- $3.~\mathrm{M}$ chapter $3.~\mathrm{M}$

4. Repeated Games: The folk theorem and supporting cooperation

- 1. MWG chapters 9, 12.
- 2. FT chapter 5.
- 3. M chapter 7.

5. Bargaining

- 1. MWG Chapter 9.A, chapter 22.
- 2. M Chapter 8.

6. Applications to problems of signalling, screening and moral hazard

- 1. MWG chapters 13, 14.
- 2. DR chapters 15 10.

7. Asymmetric Information and Mechanism Design

- 1. MWG 23.
- 2. FT 7.
- 3. Myerson, R., 1979, "Incentive Compatibility and the Bargaining Problem," Econometrica, 47: 61-73.