

MICROECONOMICS 5100

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Office hours: TBA

Useful reference books:

1. Microeconomics Theory, Mas-Collel, Whinston and Green (MWG)
2. Essential Microeconomics, J.R., Riley (R).
3. Advanced Microeconomic Theory, 2nd edition, Geoffrey A. Jehle and Philip J. Reny (JR)
4. Microeconomics Analysis Hal R. Varian (third edition)
5. Games and Information, E. Rasmusen
6. The Theory of Industrial Organization, J. Tirole
7. Duality Approaches to Microeconomics, W.E. Diewert, in Handbook of Mathematical Economics, Arrow and Intriligator
8. Bargaining Theory with Applications, A. Muthoo
9. Corporate Finance, Copeland and Weston.

COURSE OUTLINE (depending on time constraints):

1. Quick REVIEW of (i) Methodology, (ii) The Theory of the Firm (MWG: 5, Varian: 1-6, 12, JR 2, Diewert) and The Theory of Consumer Behaviour (MWG: 1-4, Varian: 7-10, JR Chapter 2, Diewert).
2. Dynamic Problems: Review of Optimal Control, Firm Investment Problem and Consumer Life Cycle Model.
3. Uncertainty: Expected Utility, Non-Expected Utility, Risk Sharing, Risk Aversion, Portfolio Choice, Stochastic Dominance, Applications, Value of Information (MWG: 6, Varian: 11, Kreps: 3, Copeland and Weston).
4. Imperfect Competition: Static and Dynamic Imperfect Competition Models, (Tirole: 1-3, 5-8, Kreps: 9-10, MWG: 12, JR 4, Varian 16).

5. Bargaining: Nash and Rubinstein Models (Muthoo), Bargaining with Imperfect Information.
6. Imperfect Information: Principal Agent Problems - Moral Hazard and Adverse Selection, Signalling, Market for "lemons", Quality/Warranties, Contracts with Asymmetric Information, Price Competition with Imperfect Information (MWG: 13-14, Rasmusen: 6-9, Kreps: 16-17, Tirole, pp 35-55, chapters 2.3, 3,9) Entry Deterrence.
7. Incomplete Contracts: Delegation of Authority and Hold-Up Problems (Tirole, pp15-34).
8. Social Choice and Welfare: Compensation Principle, Social Welfare Functions, Arrow's Impossibility Theorem (MWG 21, JR 6).

GRADING:

There will be ONE midterm exam, worth 25% (to be held on October 12) and a final exam worth 75% (to be held during the exam period).

IMPORTANT INFORMATION FOR STUDENTS

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Curriculum & Academic Standards webpage (see Reports, Initiatives, Documents) -

http://www.yorku.ca/secretariat/senate_cte_main_pages/ccas.htm

- York's Academic Honesty Policy and Procedures/Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation

References (mainly on uncertainty and imperfect information): These are some interesting & useful articles (or books). Not all are easy to read, but you may want to look at (at least) some of them. Most of the issues in these references will be addressed (in some fashion) in class. (more references will be provided as the course progresses):

Allais, M., and O. Hagen, eds. (1979), Expected Utility Hypotheses and the Allais Paradox, Reidel, Dordrecht.

- Akerlof, G., (1970) The Market for Lemons: Qualitative Uncertainty and the Market Mechanism, Quarterly Journal of Economics, 84.
- Alchian and Demsetz (1972), "Production Information Costs and Economic Organization", American Economic Review 1972, 777-795.
- Appelbaum, E. and A. Ullah, (1997), "Estimation of Moments and Production Decisions under Uncertainty", Review of Economics and Statistics.
- Appelbaum, E. and E. Katz, (1986), "Measures of Risk Aversion and the Comparative Statics of Industry Equilibrium" American Economic Review, 1986.
- Appelbaum, E. and P. Basu, (2004), "A New Methodology for the Derivation of the Equity Premium Function", Annals of Operations Research, 2010.
- Blackorby, Primont and Russell, Duality Separability and Functional Structure; Theory and Economic Applications, Amsterdam North Holland.
- Brander, J.A. and B. Spencer, "Moral Hazard and Limited Liability: Implications for the Theory of the Firm", International Economic Review, 30, 4, (1989).
- Che, Y-K and D.B. Hausch, (1999), "Cooperative Investment and the Value of Contracting", American Economic Review 89, (1), 125-147.
- Chiu, Y.S., (1998), "Noncooperative Bargaining, Hostages, and Optimal Asset Ownership", American Economic Review, Vol. 88 (4), 882-901.
- Coase, R., (1937), The Nature of the Firm, *Economica*, 4, 386-405.
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- Guesnerie and Laffont, (1984), A Complete Solution to a Class of Principal Agent Problems with ..., *J. Public Economics*, 25.
- Hart, O. and B. Holmstrom, (1987), The Theory of Contracts, in *Advances in Economic Theory*, ed. T Bewley.
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- Hart, O., The Market Mechanism as an Incentive Scheme, *Bell Journal of Economics*, 74.
- Holmstrom and Tirole, (1987), The Theory of the Firm. In *Handbook of Industrial Organization*, ed. Schmalensee and Willig.
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- Holmstrom, B. (1982), Moral Hazard in Teams, *Bell Journal of Economics*, 19.
- Jensen and Meckling, (1976), Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure, *Journal of Financial Economics*, 3.
- Jorgenson, D.W., Econometrics Methods for Modelling Producer Behaviour, in Z. Griliches and M.D. Intriligator (eds.), *Handbook of Econometrics*, Vol. 3, Amsterdam, North-Holland, 1841-1915.
- Kahneman, D. and A. Tversky, (1979), Prospect Theory: An Analysis of Decision under Risk”, *Econometrica* 47, 263-91.
- Machina, M., (1982), Expected Utility without the Independence Axioms, *Econometrica*, 50.
- Machina, M., (1987), "Choice under Uncertainty: Problems Solved and Unsolved", *Journal of Economic Perspectives* 1.
- Maskin and Riley, (1984), Monopoly with Incomplete Information, *Rand Journal of Economics*, 15.
- Milgrom and Roberts, (1986), Prices and Advertising Signals of Product Quality, *Journal of Political Economy*, 94.
- Mookherjee, D., (1984), Optimal Incentive Schemes with Many Agents, *Review of Economic Studies*, 51.
- Myerson and Satterwaite, (1983), Efficient Mechanisms for Bilateral Trading, *JET* 28.

- Pratt, J., (1964), Risk Aversion in the Small and in the Large, *Econometrica*, 32.
- Rogerson W., (1985) The First-Order Approach to Principal-Agent Problems, *Econometrica* 53.
- Ross, S., (1977), The Capital Asset Pricing Model, *Journal of Finance*, 32.
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- Salop, S., (1977), The Noisy Monopolist, *Review of Economic Studies*, 44.
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- Spence M. (1973), Job Market Signaling, *Quarterly Journal of Economics*, 87.
- Spence M. (1974), *Market Signaling*, Harvard University Press.
- Stiglitz, J., (1977), Monopoly, Nonlinear Pricing, and Imperfect Information: The Insurance Market. *Review of Economic Studies*, 44.
- Varian, H., (1987), Price Discrimination, in *Handbook of Industrial Organization*, ed. Schmalensee and Willig.
- Williamson, O., (1985), *The Economic Institutions of Capitalism*.
- Willig R. (1976), Consumer's Surplus Without Apology, *AER*, 66.
- Wilson, C., (1977), A Model of Insurance Markets with Imperfect Information, *Journal of Economic Theory* 16.