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1 Course Overview

These notes are loosely based on [1]. But the coverage differs: I cover some material that they don't and they cover a lot that I don't. In class presentations I will supplement these notes with diagrams and intuitive explanations. It is also open to marginal changes, depending on how fast we get through the material. The following is a breakdown of the topics I expect to cover.

- 1. Consumer theory.
 - (a) Theory of choice. Preference relations. Utility representation. Utility maximization. Expenditure minimization.
- 2. Producer theory.
 - (a) Production sets. Profit maximization. Expenditure minimization. Aggregation of firms.
- 3. Choice under uncertainty.
 - (a) Basic probability theory. Preferences over lotteries. Risk aversion.
- 4. General equilibrium.
 - (a) Edgeworth box. Welfare theorems. Existence and stability of general equilibrium.
- 5. Life-cycle models
 - (a) Intertemporal preferences. Dynamic inconsistency.
- 6. Recursive economics (advanced, time-permitting)
 - (a) Basic dynamic programming under certainty. Sequence problem to Bellman equation. Dynamic programming under uncertainty. Markov chains.

References

[1] A. Mas-Colell and M. Whinston and J. Green, "Microeconomic Theory", 1995.