

Econ 73-250A-F
Spring 2001
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TOPICS COVERED IN MIDTERM EXAMINATION # 1

Please notice: In general, you are required to know the material that has been covered in class for the midterm exam of February 19. Sometimes the textbook has more than what I have said in class on a given topic, sometimes it is the other way around. In both cases, I will test you on what we have seen in class. The following is an (almost) exhaustive list of topics covered in class with reference to the relative textbook chapter.

Budget Constraint (Chapter 2)

- Definition of budget constraint and budget line;
- How to graph the budget line;
- How the budget line shifts with changes in prices and income;
- Distinguishing dollar prices from relative prices;
- Distinguishing between different types of taxes and subsidies;
- How the budget line is affected by taxes and subsidies of different kind;
- Budget lines with kinks;
- Food Stamp program.

Preferences (Chapter 3)

- Preference relation;
- Axioms on preference relation (complete, transitive, reflexive);
- Indifference curves;
- Different types of preferences and related indifference curves: perfect substitutes, perfect complements.
- Properties of indifference curves (can they cross?);
- Monotonic preferences;
- Convex, strictly convex preferences and concave preferences;
- Marginal rate of substitution and its properties.

Utility (Chapter 4)

- What is a utility function;
- Under which conditions a utility function represents a preference relation;
- Plotting indifference curves: perfect substitutes, perfect complements, Cobb-Douglas;
- Marginal utility and its properties;
- Marginal rate of substitution, its relation to marginal utilities, and how to compute it given utility.

Choice (Chapter 5)

- Finding optimal choice on a graph;
- When is tangency between (minus) relative prices and MRS necessary and when is it sufficient to find an optimal choice;
- Interpretation of the tangency condition;
- Tangency with many consumers with different incomes and preferences;
- Finding the optimum with a Cobb-Douglas utility function, and properties of the Cobb-Douglas demand functions;
- Demand functions for different preferences (substitutes, complements, Cobb-Douglas);
- Choosing a tax: income or quantity taxes?

Demand (Chapter 6)

- How demand changes with income: income offer curves and Engel curves for different types of preferences;
- Normal and inferior goods;
- Luxury and necessary goods;
- How demand changes with price: price offer curves and demand curves;
- Ordinary and Giffen goods;
- How demand changes with price of other goods: substitute and complement goods;
- Inverse demand function and curve; interpretations of inverse demand curve.

Consumer's surplus (Chapter 14)

- Gross consumer's surplus;
- Consumer's surplus;
- Different ways of computing costs of higher prices for the consumer: change in consumer's surplus, compensating variation, equivalent variation;
- What do we need to know to compute each of these measures (utility function or demand function);
- Computing these measures in practice, given a consumer and a change in prices.