MobLab
A playground for decisions

Topic Coverage: Frank, Bernanke, Antonovics & Heffetz, Principles of Economics

Comparative Advantages
Textbook Chapter: Chapter 2
MobLab Game: Comparative Advantages
Key Teaching Points:
- The distinction between absolute and comparative advantage.
- Experience first hand the gains from specialization and trade.
- Differences in opportunity costs lead to mutually beneficial trade.

Supply and Demand
Textbook Chapter: Chapter 3
MobLab Game: Competitive Markets
Key Teaching Points:
- The "invisible hand" of the market: how individual profit maximization leads to competitive market equilibrium
- Price discovery: the equilibrium market-clearing price results from the valuations of different buyers and costs of different sellers
- Gains from trade (i.e., consumer and producer surplus).
- Shifts in either supply or demand change equilibrium outcomes.

Efficiency, Exchange and the Invisible Hand in Action
Textbook Chapter: Chapter 7
MobLab Game: Competitive Markets with Interventions
Key Teaching Points:
- Government interventions (per-unit taxes, subsidies, price ceilings and floors) alter equilibrium outcomes.
- Equilibrium outcomes do not depend on whether buyers or sellers pay the tax.
- The difference between tax incidence and who pays the tax.
- Relative elasticity determine incidence of a tax or subsidy.

Monopoly and Oligopoly
Textbook Chapter: Chapter 8
MobLab Game: Cournot (with Group Size=1, 2, 3, or 8)
Key Teaching Points:
- Monopolies restrict output in order to increase price.
- The tension between the quantity price effects of increased output.
- The underlying logic of the Cournot model: how market price is determined by aggregate output.
- The equilibrium outcomes of Cournot competition.
- Repeat interaction may lead to collusive behavior.

Games and Strategic Behavior
Textbook Chapter: Chapter 9
MobLab Game: Prisoner's Dilemma
Key Teaching Points:
- Key features of games: payoff matrices, best responses and dominant strategies.
- Identification of the Nash equilibrium.
- The (sometimes) conflicting incentives of cooperation and self-interest.
- Repeated play may lead to more cooperative outcomes.

Externalities
Textbook Chapter: Chapter 10
MobLab Game: Externalities with Policy Interventions
Key Teaching Points:
- With externalities, the equilibrium of a competitive market without interventions is inefficient.
- By reducing transactions, a tax can increase efficiency (total surplus) in a market with a negative externality
- Marketable permits for an activity generating a negative externality leads to efficiently reducing that activity.

The Economics of Information
Textbook Chapter: Chapter 11
MobLab Game: Market for Lemons
Key Teaching Points:

- This game introduces students to a classic market with asymmetric information: one side has payoff-relevant information (car quality) that the other side wishes it had.

- Markets where one side's type is not observable to the other side of the market can lead to adverse selection where only the worst types (low-quality cars in this case) are transacted.

Labor Markets
Textbook Chapter: Chapter 14
MobLab Game: Simple Labor Market
Key Teaching Points:
- When a perfectly competitive market determines wages, the equilibrium wage (per unit of labor) is equal to the value of the marginal product of labor of the last worker hired.

Consumer Behavior
Textbook Chapter: Chapter 7

MobLab Game: Cobb Douglas Utility Maximization
Key Teaching Points:

- Become familiar with the Cobb Douglas utility function.
- Monotonic transformations of a utility function do not affect the utility-maximizing consumption bundle.
- Utility maximization can be achieved by sequentially choosing the item with the highest marginal utility per dollar.

See also our pre-built survey-based experiments to explore framing effects, heuristics, and biases with their students including representativeness, anchoring, availability, and more. Each of these help illustrate departures from the standard rational-choice model.

Public Goods

Textbook Chapter: Chapter 14
MobLab Game: Linear Public Good
Key Teaching Points:

- Highlights the features of public goods: non-rival and non-excludable.
- Demonstrates the distinction between private and social benefits of public goods.
- Shows how individual profit maximization leads to the free-rider problem.

Inflation

Textbook Chapter: Chapter 16
MobLab Game: Interest Rate and Inflation (Loan Market)
Key Teaching Points:

- Supply and demand determines the equilibrium interest rate. Absent investment-return uncertainty, those with the lowest opportunity cost lend to those with the highest real return on investment.
- Speculative asset bubbles can arise even if the asset's dividend distribution and terminal value are common knowledge.

Financial Markets

Textbook Chapter: Chapter 19
MobLab Game: Asset Market (Bubbles and Crashes)
Key Teaching Points:

- With risk neutral investors, an asset's fundamental value is the present discounted value of expected dividends (plus discounted terminal value, if applicable).
- Speculative asset bubbles can arise even if the asset's dividend distribution and terminal value are common knowledge.