MobLab
A playground for decisions

Topic Coverage: Schiller & Gebhardt: *The Economy Today*

Trade-offs and Comparative Advantage
Textbook Chapter: Chapters 1 & 2 (Microeconomics & Macroeconomics)
MobLab Game: Comparative Advantage
Key Learning Objectives:
- 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.

Demand, Supply and Equilibrium
Textbook Chapter: Chapter 3 (Microeconomics & Macroeconomics)
MobLab Game: Competitive Market
Key Learning Objectives:
- 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.

Government Interventions in Competitive Markets
Textbook Chapter: Chapter 4 (Microeconomics & Macroeconomics)
MobLab Game: Competitive Market
Key Learning Objectives:
- 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 elasticities determine incidence of a tax or subsidy.
- Excess supply (price floors) and excess demand (price ceilings).
- The efficiency implications of government interventions.

Keynesian Thought Model
Textbook Chapter: Chapter 9 (Macroeconomics)
MobLab Game: (Keynesian) Beauty Contest
Key Teaching Points:
- Strategic thought requires making conjectures about the reasoning and choices of others whose actions affect the payoffs of my choices.
- Students learn the logic behind iterated dominance

Unemployment

Textbook Chapter: Chapter 6 (Macroeconomics) Chapter 30 (Microeconomics)
MobLab Game: Simple Labor Market
Key Teaching Points:

- Employment levels are determined by both the supply and demand of labor.
- Policies such as a minimum wage or unemployment insurance affect structural unemployment.

Financial Markets

Textbook Chapter: Chapter 13 & 14 (Macroeconomics)
MobLab Game: Bank Run
Key Learning Objectives:

- Highlights the underlying concept of fractional banking.
- Demonstrates the trade-off between profit and risk, and shows how bank runs may arise.
- Policy interventions, such as deposit insurance, can reduce the possibility of bank runs.

Consumer Choice / Utility Maximization

Textbook Chapter: Chapter 19 (Microeconomics)
MobLab Game: Consumer Choice: Cobb-Douglas
Key Teaching Points:

- When allocating a fixed budget, sequentially choosing the item offering the highest marginal utility per dollar will generally lead to the utility-maximizing budget allocation.
- Students will gain familiarity with some of the implications of the Cobb Douglas utility function, including the result that an item's optimal budget share is equal the ratio of its exponent to the sum of all exponents.
- A monotonic transformation of a utility function does not affect the utility-maximizing consumption bundle.

Perfect Competition

Textbook Chapter: Chapter 22 (Microeconomics)
MobLab Game: Production, Entry & Exit
Key Learning Objectives:

- Short-run profit maximization involves thinking at the margin.
- In the long-run equilibrium of a constant-cost industry with identical firms, all firms earn zero economic profits.

Monopoly Pricing

Textbook Chapter: Chapter 24 (Microeconomics)
MobLab Game: Cournot (with Group Size=1)
Key Learning Objectives:

- Monopolies restrict output in order to increase price.
- The tension between the quantity price effects of increased output.

Oligopoly
Textbook Chapter: Chapter 25 (Microeconomics)
MobLab Game: Prisoner's Dilemma
Key Learning Objectives:
- 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.

Monopolistic Competition
Textbook Chapter: Chapter 26 (Microeconomics)
MobLab Game: Bertrand
Key Teaching Points:
- When selling an undifferentiated product without capacity constraints, firms have strong short-run incentives to engage in vigorous price competition.
- Marginal-cost pricing may arise in markets with as few as two firms.
- Use of Bertrand Competition allows instructor to focus on factors facilitating collusion in repeat interactions.

Asymmetric Information (Adverse Selection)
Textbook Chapter: Chapter 14 (Microeconomics)
MobLab Game: Market for Lemons
Key Learning Objectives:
- Experience in a market with asymmetric information.
- Asymmetric information may lead to adverse selection and market failure.

Public Goods
Textbook Chapter: Chapter 28 (Microeconomics)
MobLab Game: Public Good: Discrete (Threshold)
Key Learning Objectives:
- 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.

Negative Externalities
Textbook Chapter: Chapter 34 (Microeconomics)
MobLab Game: Externalities w/Policy Interventions
Key Learning Objectives:
- 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.