

Johns Hopkins Center for Talented Youth

Fundamentals of Microeconomics

Sample Syllabus

Day: Orientation			
Session	Topic	Related activities	Reference
Evening	Introduction Class rules, Overview of syllabus, Honor code, Pre-assessment	Survey test (MCQ, math skills, explanatory essay)	
Day 1			
Morning	Overview of economics/ Microeconomics -microeconomic objectives Key Concepts in Economics -Economic principles -The Market and Government	Lecture Activity	MK -1
Afternoon	-Positive and Normative Economics - Ceteris paribus	Lecture	MK -2
	Thinking like an economist:Zero Price Doesn't Mean Zero Cost	In class activity: application of economic principles and check how much you can apply	SHO-1
Evening	Rationality: What does it mean? Why it is important in economic analysis? Analyzing Economic Policy News	-Individual test problems -Reading economic news	
	One to one discussion session Pre-assessment grade and individual discussion/feedback		
Day 2			
Morning	Economic model Working with math and graph The Production Possibilities Frontier(PPF) -Shape of PPF -Economic principles with PPF -Law of Increasing Opportunity Costs	Lecture	Appendix A SHO-1 MK-2
	Economics in reality:Where did all	Activity: How does	

	US farmers go?	technological advancement in one sector of the economy can have ripple effects throughout the economy	
	How much you would like to enjoy: Create Your own PPF and show your Enjoyment and YOUR GRADE!!	Activity: Create your own PPF	SHO
	Circular flow: basics and relevancy in microeconomics Interdependence and gains from trade	Lecture	MK-3
<i>Experts economist opinion</i> Public policy Debates Explained in Terms of the PPF			
Should we spend more on military or on health care or on environmental protection or on technological advancement/science research			
Afternoon	Comparative advantage: A Simple Two-Person PPF Model Specialization, Trade, and The PPF	Lecture	
	Can you trade on a desert island?	Activity: Comparative Advantage simulation	SHO
Evening	PPF and economic principles	Concept review	
	Problem solving	Problems, answers	
	Working With Numbers And Graphs	and application	
	Analyzing microeconomic data using R programming language		
	Introducing economics blog, how to create and write on your econ blog, Eminent economist, Economists on Twitter/Facebook	Showing econ blog, Economists in our time, What they often focus on blog	GREG MANKIWS BLOG,
Day 3			
Morning	Market in reality	Familiarity with market places	
	Want, needs and Demand Two sides of market Demand and supply Law of demand:Four Ways to Represent the Law of Demand Determinants of demand Law of supply:Four Ways to Represent the Law of Supply Determinants of supply	Lecture	MK-4
	Check your understanding	Activity: Create	

		your demand and supply schedule and then determine market demand/supply	
Activity: Economics in News Explain news contents using demand and supply terminologies			
Afternoon	Market equilibrium: put supply and demand together Consumer surplus and producer surplus	Lecture	MK-4
	Determining market equilibrium	Activity	
Evening	Individual test problem -Drawing demand, supply and market equilibrium -Working with data and visualization	-Understanding problem and ability to solve - Supply and demand drill	MK-4
Day 4			
Morning	Price Elasticity of Demand Slope vs elasticity Price Elasticity of Demand and Total Revenue (Total Expenditure) Price Elasticity of Demand Along a Straight-Line Demand Curve Determinants of Price Elasticity of Demand	Lecture	MK-5
	Elasticity Demonstration	Activity: Different types of rubber bands that illustrate different levels of elasticity	
	Mathematics of elasticity: Computing elasticity	Lecture	
	Check your understanding	Activity: Raking elasticity and interpret elasticity values using daily stuffs	SHO
Afternoon	Applications of elasticity in reality -Earthquake in Los Angeles and elasticity -Greenhouse Gases and Gas-Efficient Cars House Prices and the Elasticity of Supply	Lecture	MK-6
	Normal or inferior or luxury good-compute elasticity and interpret	Activity	

	elasticity values using daily items		
Evening	Demand -supply simulation	Practice session	
Day 5			
Morning	Role of Price Consumers, producers and efficiency of markets Price Controls Taxes on Specific Goods and Relative Deadweight loss of taxation	Lecture	MK-7, 8
	Finding economics in reality (24/7)	Group activities and presentation: -Analyze a market for Smart phone -tax on Soda and obesity -severe frost in the coffee production and an excessive harvest for tea	SHO
	Economics in reality: Minimum wage	NEWS ANALYSIS	
Afternoon	Demand- supply simulation: extended version The Relationship Between Taxes and Elasticity Degree of Elasticity and Tax Revenue		SHO
	Economics in reality: Minimum wage	Demonstration: You are on TV Interview	
	Beyond the textbook: Become a popular media person/economist Writing your weekly blog/Column on real/concurrent economic issues		
Day 6			
Session	Topic	Related activities	Reference
Morning	International Trade: Application of Demand-Supply and taxation International trade and WTO - World price - Tariffs - Quotas - WTO and global trade disputes Trade and environment	Lecture In class activity	MK-9
Afternoon	-Practice problems - Current trade issues - Recent US trade issue with EU and Canada	US tariffs on Steel and Aluminum Activity: WHERE DID MY T-SHIRT COME	

	- Model WTO debate on dispute settlements	FROM	
Evening	Practice problem	In class group work	MK-9
	Meet the press		
	Meet the press 3-question media interview on Trade policy		
	Students will talk about recent G7 trade summit and US tariff and domestic market issues as the secretary of trade/the president of the country		
Day 7			
Morning	Utility: Total and Marginal Diamond-Water Paradox Law of Diminishing Marginal Utility Maximizing utility and consumer equilibrium	Lecture	Lecture, SHO MK-21
	Observing law of diminishing MU	Activity: Examine your friends with various goods if they satisfy law of diminishing MU	SHO
	Interactive session	Discussion: How You Pay for Good Weather? Do Rats Maximize Utility? Do smokers Maximize Utility?	
Afternoon	The Budget Constraint Shifting budget line Indifference Curves Characteristics of Indifference Curves(IC) The Indifference Map and the Budget Constraint Come Together	Lecture	
	Check your understanding	Activity: Draw your budget line And IC	SHO
	Fun session: Depicting a lifelong loving relationship	True love-A loving equilibrium for ever	
Evening	Working with economics data	Analyzing microeconomic data using R programming language	SHO
Day 8			
Morning	Morning quiz		Day 6
	What is a Firm Why Firms Exist, two sides of firm Profit, production, Marginal Physical Product (MPP)	Lecture	MK-13

	Law of Diminishing Marginal Returns(LDMR)		
	Check your understanding	Activity: Create a LDMR schedule	
	Creative thinking and explore opportunities	Activity: sketch an innovative business firm idea of your choice Are You an Entrepreneur?	SHO
Afternoon	Types of Costs Short run and long run Graphical familiarity with cost curves LAC and Economies of Scale	Lecture	MK-13
	Create a complete Firm's production schedule	Activity: working with firm level data and drawing graph	
	News Analysis	Global competitiveness and US firms	
Evening	Problem solving What Matters to Global Competitiveness?	Working With Numbers And Graphs Activity : global competitiveness rank, Presentation	
Day 9			
Morning	Market Structure The theory of perfect competition A Perfectly Competitive Firm Demand curve and MR curve	Lecture	MK-14
	Check in your understanding	Activity: Calculate firm's demand and MR curve and show in graph	
	Profit Maximization Rule Resource Allocative Efficiency	Lecture	MK-14
	Thinking like an economist	Activity: To Produce or Not to Produce, higher costs and higher prices, advertising, and setting prices.	
Afternoon	the Shutdown Decision The Perfectly Competitive Firm's Short-Run Supply Curve Firm in Long run	Lecture	MK-14

	Check your understanding	Activity: Will you continue your business or shut your business down?	
Evening	Economics in reality Problem solving	Discussion: How Is High-Quality Land like a Genius Software Engineer? Working with data and graph	MK-14
Day 10			
Morning	The Theory of Monopoly Barriers to Entry: A Key to Understanding Monopoly Monopoly Pricing and Output Decisions	Lecture	MK-15
	Check your understanding	Play with graph	
	Economics in reality	Activity: Monopoly in the price of songs	
Afternoon	If a Firm Maximizes Revenue, Does It Automatically Maximize Profit Too? Perfect competition vs monopoly Case against monopoly Types of Price Discrimination	Lecture	MK-15
	Check your understanding	Activity: Do Colleges and Universities Price Discriminate?	
	How much you know: History of monopoly	Activity: Monopoly and the Boston Tea Party	
Evening	Monopoly in the US market	News analysis	SHO
	Check your understanding	Review on monopoly	
	Final presentation and poster		
Day 11			
Morning	The theory of Monopolistic Competition Assumptions The Monopolistic Competitive Firm's Output and Price Excess Capacity: What Is It, and Is It "Good" or "Bad"? The Monopolistic Competitor and Two Types of Efficiency	Lecture	MK-16
	Check your understanding	Activity: A Comparison of Perfect	

		Competition and Monopolistic Competition-The Issue of Excess Capacity	
Afternoon	oligopoly: assumptions and Real-World Behavior Price and Output Under the Cartel Theory	Lecture	MK-16
	Fun session: Will you CHEAT	Activity: The Benefits of Cheating on the Cartel Agreement	
	Check your understanding	Activity: How Is a New Year's Resolution Like a Cartel Agreement?	
Evening	Final presentation and poster	Finalize topic for final presentation and poster Finalize poster and presentation outline	

Day 12

Session	Topic	Related activities	Reference
Morning	Oligopoly Markets with only few sellers Competition, monopolies and cartels	Lecture	MK-17
	Economics of cooperation	Prisoners dilemma	
Afternoon	Factor Markets The Demand for a Factor The MRP Curve Is the Firm's Factor Demand Curve Is $MRP = VMP$?	Lecture	MK-18
Evening	Would you like to be a lawyer or an economist?	Debate on who is influential for our economy: Lawyer vs Economist	SHO
	Poster presentation	Oversee the progress of group work	

Day 13

Morning	Externalities: Costs and Benefits of	Lecture	MK-10
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	Activities Market failure Socially Optimal Amount (Output) Internalizing Externalities Dealing with a Negative Externality in the Environment The Coase theorem		
	Check your understanding	Activity: Estimating social welfare loss	
	Economist on environment	Activity: Case study and group presentation	SHO
Afternoon	Public Goods: Excludable and Nonexcludable The Free Rider Asymmetric Information Adverse Selection Moral hazard	Lecture	MK-12
	Check your understanding	Activity: Arriving Late to Class, Grading on a Curve, and Studying Together for the Midterm	
Evening	Poster presentation	Finalization of group work	
Day 14			
Morning	Final presentation: A joint presentation session with Probability and Game Theory class	Group presentation	
Afternoon	Post-Assessment test		
Day 15			
Morning	Fun session Final thoughts Good bye		

Reference

1. Principles of Microeconomics (8th edition), Gregory Mankiw (MK)
2. Session Handout (SHO)