Intro to microeconomics notes assignment

[Economics](#), [Microeconomics](#)

What is Economics? Economics is the study of choices Choices must be made because resources are scarce Make a list of all the stuff you like to acquire assuming unlimited income Dry. S Home on CSCW Tons of boats +350, Club cab Season tickets to ANY, NJ Nets, NY Giants Condo in NYC Tickets to Cup Races Mobile Home Triumph TRY-6 Toyota Languisher Realistic income Home near CSCW A boat Occasional tickets Toyota 4 Runner Choices mean we make trade-offs Opportunity Cost Informal definition: What you give up when you make a choice Formal: The value of the next-best, but unclosed alternative Opportunity Cost Example:

Job choice: Suppose after graduation you have 2 Job options A. IBM in ART. Salary= $70, 000 B. Own consulting firm in Will. Salary'= $30, 000 Suppose you choose option B, what is the opportunity cost of this decision? Answer: $70, 000 + full value of benefits (living in Triangle area, etc.) Opportunity Cost Example: Jeopardy xx champ Pick a car! A. Audio TTT coin B. BMW 5 sense C. Mercedes CLC D. Caddy Escalated (base) E. Lincoln Navigator Suppose you choose the Audio, what is the opportunity cost of this decision?

Whichever car would have been your second pick " There is no such thing as a " free lunch"? There is an opportunity cost associated with consuming the lunch you didn't pay for. (give up your time, etc.) Microeconomics vs. Macroeconomics Microeconomics- Study of small decision making units Macroeconomics- Study to large decision making units Types of economics Health economics, sports, national resources, labor, economic history, money, trade, etc.

What do economists do? Economists engage in " positive analysis" Objective use of facts, theory, data, and models (math and stats) to make conclusions about what is or what might happen if… Objective- Unbiased, lacking personal opinion Might involve professional opinion Contrast this idea with " normative analysis" Opinion-based statements or questions about what ought to be.

Involves personal bias and Judgment Example of " positive analysis" A tool we use (falls under positive analysis) is cost-benefit analysis (CAB) Identifying, measuring, and comparing the costs and benefits of an action to help make decisions Decision-Making Rule If Benefits > Costs, the action results in a net gain and so can be considered a " good idea" Including opportunity costs If Benefits Costs, the action results in no net gain or net loss, but still can be insider a " good idea" " Rational behavior" Doing things for which benefits costs Useful for yes/no decisions if total benefits > total costs Net gain miss" is a good idea Marginal Analysis Compare incremental (additional) cost and incremental benefit Useful for quantity decisions (how much, how many, when) Marginal Analysis example How many slices of pizza to eat? Assume that the price of each slice $1. 50 and assume that we know how much we value each slice (I. E. We know benefits from each slice) Q (Quantity) MAC (Marginal Cost) (Marginal Benefit) $1. 50 : D (4. 50) 2 (3. 00) 3 4 (1. 00) 5 (0. 75)

Principle of Diminishing Marginal Benefit As we consume more and more units of a good, the additional satisfaction gained from each unit will decrease Assuming that all units are of the same quality Marginal Benefit

What the next unit is worth to you Value to you of the next unit Maximum amount you would be willing to pay Maximum WIT (willingness to pay) " Reservation price" " Choke price" Marginal Net Game (MOB-MAC) Total Net Game E (MOB-MAC) 3. 00 1. 50 4. 50 0. 01 4. 51 -0. 50 4. 01 -0. 75 3. 26 " Net Gain" Economic Surplus Net gains to consumers " Consumer Surplus" Net gains to sellers " Producer Surplus" WRITE DOWN NUMBER OF GRAPH UNDER YOUR NAME ON FINAL EXAM FOR BONUS POINTS!!!!!! To maximize total net gains you should consume all work for which MOB MAC I. E.

Consume up to the point where M What if you were asked to compare the total benefits and total costs of 5 slices and do a yes/no CAB, should you eat 5 slices, yes or no? Total Benefits from 5 slices – $10. 76 Total cost = $7. 50 Net Gate= $3. 26 Consider goods that can be purchased with a flat fee I. E. Pay one price and consume as much as you want E. G. All you can eat buffet, cable TV, gym membership, season passes, unlimited minutes Marginal cost = O It's optimal to keep consuming until MOB= O Decision Pitfalls Decision-making mistakes It is a mistake to… 1. Ignore opportunity cost Opportunity costs should be considered! E. G. Suppose you're going on a 8 day trip. Each weekend away meaner lost work. Daily wage (M-F) = $300.

Flight A- sat-sat pence=$500 Flight B- Thrust-Thrust pence=$300 Which flight is cheaper? Flight B is more expensive because of 6 lost days of work 2. Fail to ignore " sunk cost" " Sunk cost" should be ignored! " Sunk cost" are costs that are already paid and cannot be recovered 3. Use percentage savings to make purchasing decisions Purchase A Car Raleigh: Wilmington: Purchase B Plane Ticket 3RD-destination: pence=$300 ELM-destination:

Price=$600 Use dollar amounts, not percentages 4. Use average costs and benefits instead of marginal costs and benefits to make quantity decisions TAB of 5 slices=$10. 76 Average benefit per slice=$2. 15 Average cost per slice= $1. 0 It is a mistake to consider that 5 slices is a good decision Just because the average benefit > average cost Compare MOB and MAC instead Goal: Develop a " production possibilities" model that shows how a nation can use it scarce productive resources (land, labor, capital) to produce alternative combinations t goods 1st develop a similar model that snows now an individual can use their scarce financial resource (income) to purchase alternative combination of goods Budget Line Model/Budget Constraint Budget Line Handout Suppose we have $50 to spend on 2 goods: Bagels (B) and Coffee (C) and prices are : Price per bagel BP = $1. 00 Price per coffee PC= $0. 50 What is the opportunity cost of one bagel? Pop cost B= C What is the Pop cost of 1 C? Pop cost ICC= hub Note: The Pop cost if one good in terms of the other is determined by their relative prices (ratios) Consider all the ways you could spend your $50...

Consumption Possibilities ICP CAP cops CAP Bagels 50 25 Coffee 20 $ Spent $50 We can draw a " budget line" (or " budget constraint) that shows all consumption SEE WORKSHEET FOR GRAPH Budget line every point on this line represents a combination of the 2 goods that we can purchase with out income Points on the B. C. Represent combinations we can afford with no money left over Points within the boundaries of the B. C. Can be purchased, but we'll have money left over Points outside the B. C. Cannot be purchased (beyond out budget) The slope of the B. C. Shows the opportunity cost of the

goods in terms of the other good Slope= Rise/Run= ABA/AC= -h = PC / BP E. G.

More from ICP to CAP Game SOC Give up 2 Pop cost of 50 c 25 B Pop cost 1 C= hub Pop cost 1 B= C Slope of a B. C is determined by the relative prices of the 2 goods The reason we can trade 2 C for 1 B is that the price off bagel is xx the price of a coffee Equation for a B. C. Show the effect of doubling income to $100 Income => B. C. Shifts out in a parallel fashion, so we can afford more of both goods Starting with original B. C. Shows the effect of cutting both prices by h Old: 1= 50, BP= 0. 50, PC= o. 25 Exact same shift as doubling income Show the effect of rising the price of coffee to $1. 00 $1. 0 B. C shifts in on the coffee axis only Has the increase in the price of coffee affected the amount of bagels you can purchase?

Yes, unless you only purchase bagels. If you buy at least some coffee them the rise of the price of coffee meaner you have less money remaining to spend on the other good. The Production Possibilities Model AKA (Production Possibilities Curve " PC", Production Possibilities Frontier " APP') A model that shows how a nation can allocate its scarce productive resources (land, labor, capital) to produce different combinations of goods Example: The very small nation of Happened. In Happened only 2 goods are produced: Beer and Pizza. Assume that quantity and quality of productive measures is fixed (for now) Resources are specialized for the production of one of the goods E. G.

Labor: Some of our labor units are specialists and some are generalists (some are good beer makers, but not pizza makers and vice versa and some can be a mix of both) Note: Specialists units and are the same Assume that

we know that the following production possibilities (combination of Beer and Pizza) can be produced, using all of Happening's resources Production Possibilities Pl Beer 1 o, oho 90, 000 70, 000 40, 000 Pizza 10, oho 20, 000 30, 000 Using these combinations we can draw a graph that represents all of them Production Possibilities Curve (PC) Points on the PC are combinations of Beer and Pizza that we can produce using 100% of our resources Points inside the PC can be produced, but leave some resources unused Points outside the PC cannot be produced with available resources The slope of the PC shows the opportunity cost of one good in terms of the other Example: Suppose we start with PIP and we move to app.

Gait-1 10 P, lose BOB Pop cost 10 B Pop cost 1 P= BI From APP to APP Gait-1 10 P, lose BOB Pop cost 10 & BOB up cost 1 P= B Principle of Increasing Pop Cost As we produce more of a good, the Pop cost of that good increases because inputs are specialized Shifting the PC The PC will shift out (away from the origin) if we have more productive resources (labor, land, capital)… E. G. Population growth, investment in new capital, … Or if we have higher quality resources E. G. Education, skills, technology Both of these elements result in economic growth What might cause a PC to shift in toward the origin? Natural disaster, war, recession Draw a PC for Agricultural goods and Consumer goods and show the effect of an improvement in technology in the agricultural goods industry Has the new Agar. Technology affected the amount of consumer goods that can be produced? Assume that we need to produce at least some of both. YES!!!

The Principle of Comparative advantage and gains from trade A point outside of the PC cannot be produced Nations can consume beyond their production possibilities through trade Comparative Advantage meaner having a lower opportunity cost than your trading partner Absolute Advantage meaner being faster or better Ex. AH and Sal are stuck on an island where all they can produce are two goods: Fish ND Coconuts In a day, each can produce either the following amounts of Fish and Coconuts One-day Production Possibilities Fish Coconuts 9 Calculate the Pop cost of 1 unit of each good for each person Ass's Pop costs: 1 day = 25 C Pop cost IF = 25 C IF= C 1 C = 1/5 F Gal's Pop costs: 1 day = IF= C Pop cost IF = C IF-C 1/IF Sal has the lower Pop cost (I. E.

Comparative Advantage) in Fish, while AH has the Comparative Advantage in Coconuts Principle of Comparative Advantage If each trading partner produces the good for which they have a lower Pop cost and trades for (" Imports") high Pop cost goods, then each trading partner can be better Han without trade AH hunts for only coconuts, Sal only fishes AH is willing to pay up to 5 coconuts per fish, while Sal is willing to accept any amount of coconuts 3 per fish Fair and mutually beneficial trade is : C for IF Supply and Demand A model of a market Learn how and why prices change Terms: Market- exists anytime a buyer and seller agree on price and a transaction takes place Buyers- demander Sellers- suppliers Demand- the name given to the relationship to the price of a good (P) and the quality demented (QPS) by consumers Consider the relationship between of a good and the mount you are willing to purchase (SQ) There is an inverse relationship between Price and Willingness to Purchase The Law of Demand Ways to represent Demand

Demand Schedule A list of prices for a good and corresponding quantities demented E. G. The Wilmington market for surfboards 300 1 oho 700 200 How to represent demand? Context of a specific good in a particular market E. G. The Wilmington market for surfboards 1. Demand Schedule Table of Price and Quality Demented combinations 2. Demand Curve Graph of a demand schedule Demand Curves are downward sloping Two ways to " read" a demand curve

Start with a price and demand gives you SQ E. G at $600 SQ= 400 units Start with a quantity and demand gives you the price consumers are willing and able to pay E. G. For the 80th unit consumers are willing to pay $400 Demand curves are " willingness to pay' curves Demand equation 1200-IPPP Y = mix+b What factors will cause " demand" to change? (Demand Shifters) These are factors that are held constant along a particular demand curve, so if we change one or more of these the relationship between price and SQ will change I. E. Demand will change, draw a new D curve Demand shifters 1 . Season, popularity, fashion, fad When something is " in season" fashionable... Emend will increase We show an increase in demand by having higher SQ at all prices (at any P) An increase in demand is shown by shifting the demand curve to the right Higher SQ at any P Higher WIT for any Q When a good becomes less popular (out of season) demand will decrease which shifts the demand left (lower SQ at all prices) lower WIT for any Q 2. Consumer Income (or Wealth) When income increases, demand increases (shifts right) This is true for " normal goods" For some goods (" inferior goods") as income increases, demand decreases and as income decreases, demand increases E. . Ramee noodles and generic brand 3. The Price of

Substitute goods E. G. Coke and Pepsi are substitutes What happens to the demand for Pepsi when the price of Coke goes down? Demand to Pepsi sin TTS to the let 4. The price of complement goods E. G.

Peanut Butter and Jelly are complements What happens to the demand for Jelly when the price of BP decreases? Decrease of complement causes an increase demand for the other 5. Consumer's expectations about the future price of the good If consumers expect price to rise in the future, today's demand will increase 6. Consumer's expectation of their future income Expect your income to increase in future, today's demand may increase A change in Quantity Demented vs. a change in Demand Change of Demand is shown by shifting demand curve caused by a change in one of the 6 factors Change of Quantity Demented is shown by moving along a stable demand curve caused by a change in price If price decreases from $2. 00 to $1. 0, then Q. D. Will increase from 50 to 60 Note: The Supply curve must be shifting for this to happen T

Price goes up on inputs causes profits to go down at any price and willingness goes down to bring good to market and supply goes down, shifting curve to left 3. Technology Better tech meaner it is easier to produce the good (lower Pop cost), higher profit per unit, supply goes up 4. The price of other goods that can be produced with the same inputs E. G. Little cars and big trucks can be produced with the same inputs What happens to the supply of little cars when the price of big trucks decreases? The supply of little cars will increase as sellers take resources away from less profitable trucks to more profitable little cars 5. Weather (for agric. Goods) Put supply

and demand together a model of a market P* and Q* are the " equilibrium"

price and quantity At pence = SQ = SQ