Topics:

* Utility
  + Marginal Utility
    - Definition
    - How to Calculate it
  + Consumer Preferences
    - Indifference
  + Budget Constraint
    - What causes it to shift
      * Change in price, etc
    - Meaning of slope
  + Indifference Curves
    - Implication of the fact that they are convex
    - Definition
    - Meaning of slope
  + Utility Maximization Rule
    - Problem, given a table price of goods and income level. Total Utility.
      * Utility Maximizing Combination of the two goods
      * Total Utility
    - Income/Substitution Effects
      * Definition/Graph
* Health Insurance
  + Expected Value
  + Problem
    - Loading Cost
    - Pure Premium (Expected Loss)
    - Maximum Premium
  + Impact of catastrophic illness on the model
* Producer
  + Production Function (Short Run)
    - Definition
  + Short Run/Long Run
  + Marginal Product
    - Defintion and Calculate
  + Input/Output Table
    - Fined Marginal Product of Labor and Marginal Product of Capital
  + Average Product (Definition)
* Increasing/Decreasing Marginal Utility
  + Relationship between Marginal Product and Average Product
* Isoquant
  + Definition (identical outputs given different inputs of labor/capital)
  + Slope
* Isocost
  + Shift
  + Slope
* Least Cost Combination
  + Rule, Problem
* Returns to Scale
  + Increasing/Decreasing/Constant
  + Definition
  + Cobb Douglas (Test inputs of 1 then inputs of 2, if exactly double constant, etc)
* Difference between increasing/decreasing marginal productivity and increasing/decreasing returns to scale.

Health Insurance Problem:

Individual with Utility Function given by u = 6sqrt(I)

Income of $140,000

15% Chance of becoming ill, cost of illness = $55,000

Find Loading Cost, Pure Premium, Maximum Premium

Expected Income = .85(140000) + .15(85000) = 131750 (a)

Expected Utility = .85(6sqrt(140000)) + .15(6sqrt(85000)) = 2171 (b)

2171 = 6sqrt(I) solve for I (c)

LC = a – c

PP = Income – a

MP = LC + PP