

# Economics 326 (Introduction)

Ethan Kaplan

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# 1 Introduction to Instructors

- Instructor: Ethan Kaplan
  - kaplan@econ.umd.edu
- Teaching Assistant: Hector Lopez Carbajal
  - carbajal@econ.umd.edu
- Teaching Assistant: Marisol Rodriguez Chatruc
  - RodriguezChatruc@econ.umd.edu
- Sections
  - Section 0101 – Fridays 9AM - 1103 TLF – Hector Lopez Cabrajal
  - Section 0102 – Fridays 10AM – 2106 TYD – Hector Lopez Cabrajal

- Section 0103 – Fridays 11AM – 1118 TYD – Marisol Rodriguez Chatruc
- Section 0104 – Fridays 12PM – 1121 SQH – Marisol Rodriguez Chatruc
- Section 0105 – Fridays 9AM – merged with Section 0101 (go to 1103 TLF)
- Section 0106 – Wednesdays 12PM – 1101 TYD
  - Until 10/10: Marisal Rodriguez Chatruc; After 10/10: Hector Lopez Cabrajal

## **2 Logistics**

- Course Requirements
  - 6 Homeworks

- 2 Midterms
- 1 Final
- 4 surprise quizzes in section (extra credit)
  
- Grading
  - 30% Homeworks (Top 5 scores count - each homework = 6%)
  - 40% Midterms (Each midterm = 20%)
  - 30% Final
  - 10% Quizzes (Extra credit - Each quiz = 2.5%)
  
- Textbook
  - Recommended - Nicholson and Snyder: Microeconomic Theory

- Additional text (less advanced)- Pindyck and Rubinfeld

- Office Hours

- Ethan: TBD

- Hector: TBD

- Marisol: TBD

- Exam Policies

- Make up examinations

- \* 4 Types of Excuses for Missing an Exam

- Religious Holiday

- Official University Sponsored Event

- Medical Reasons

- Other Events Beyond the Student's Control
  - \* Requests must be in writing (e-mail) and as far in advance as possible; for conflicts with religious holidays or officially sponsored University of Maryland events, you must notify the instructor within the first 3 weeks of class
  - \* Requests must be made to the instructor only; TAs do not have the ability to grant a make-up examination
- Cheating: We follow the university policy on cheating; students caught cheating on an exam or copying homework will be sent to the student honor council.
- Students with Disabilities: If you have a disability and you need special accommodations, we are happy to provide what you need. Come to speak with the instructor. Again, the TAs do not have the ability to grant special accommodations.

- Section Attendance: You are allowed to go to any section as long as there is space. The teaching assistants have final say on whether there is space or not. Students attending their assigned section will never be turned away.
- Prerequisites
  - Economics: Passed Economics 200 and Economics 201.
  - Mathematics:  $\infty$ 
    - \* Passed Economics 300 with "C" or
    - \* Currently taking Mathematics 240 or 241 (which implies having passed Calculus I and Calculus II)
  - Exceptions: Talk to Shanna Edinger in Tydings 3108C.

- Lecture Notes: Will be available on ELMS and my website: <http://econweb.umd.edu/~kaplan/>.

### 3 Course Overview

- Most microeconomics courses study price theory: the theory of markets
  - Determination of prices and quantities sold of goods and services
- Three Methods of Argumentation
  - Mathematical
    - \* Based in Methodological Individualism (Individual is Basis of Analysis)
  - Graphical



- Intuitive/Verbal
- Determinants of price and quantity in one market (partial equilibrium):
  - Supply: Technology, prices of inputs
  - Demand: Preferences, income, prices of other goods
  - Price and quantity is such that supply = demand (market clearing price)
- How does the market find the market clearing price?
  - Auctions (Ebay, NYSE)
  - Trial and Error
  - Government
    - \* Price floors: minimum wage

- \* Price ceilings: credit cards
- \* Price setting during wars or in some countries (i.e. Soviet Union)
- \* Provides legal environment for markets, impacting price
  - Insurance
  - Drugs
  
- Markets exist within institutional frameworks
  
- Most transactions happen outside of markets
  - Firms
  - Families
  
- Markets do not necessarily function well

- Insurance
- Doctor Services

- Outline

- Demand Side
  - \* Preferences, Income, Prices in Other Goods Markets- $\rightarrow$ Demand
- Supply Side
  - \* Technology, Input Prices- $\rightarrow$ Supply
- Equilibrium
  - \* Partial Equilibrium
    - Equate Supply and Demand
  - \* General Equilibrium
    - Do Markets Clear?

- Markets vs. Planning
  - Imperfect Competition
  - Externalities, Missing Markets, and Public Goods
  - Informational Imperfections
  - Behavioral Economics
  - Resource Allocation Outside the Market

## 4 Useful Terminology

- Positive Economics: Predictive - tries to explain what is
- Normative: Prescriptive - tries to make recommendations on what should be

- Language of efficiency
  - This course will focus more on positive economics but we will also cover normative economics. Also, we will discuss what types of assumptions are important for drawing what types of normative conclusions. Many of these assumptions are important for our choice of political systems.
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- Objective Function: Something to be Maximized or Minimized
  - Constraint: An additional equation which constrains the maximization or minimization of an objective function.
    - Budget
      - \* Equality

$$P_{Beans}Q_{Beans} + P_{Rice}Q_{Rice} = I$$

\* Inequality

$$P_{Beans}Q_{Beans} + P_{Rice}Q_{Rice} \leq I$$

- Endogenous Variable: A variable solved within the model
  - Control Variables: A variable directly controlled and decided upon by an agent in the model
    - \* Quantities Consumed or Produced in a Consumer Utility Maximization Model or Producer Profit Maximization Model
    - \* Price in a Monopoly Model, Wage in a Monopsony Model
  - Non-control Variables: A variable not decided upon by any agent in the model and yet determined within the model
    - \* Prices in a Partial Equilibrium Model

## \* Prices in a General Equilibrium Model

- Exogenous Parameter: A variable determined outside the model and thus taken as given within the model
  - Price in Consumer Utility Maximization
  - Wage in Competitive Profit Maximization
- Comparative Statics: Relating an endogenous variable to an exogenous parameter
  - Impact of the price of corn on corn consumption
  - Impact of the wage rate on car production
- Important Note: The same economic object can be an exogenous parameter in one model, a control variable in another model and a non-control variable in another model. In other words, the mathematical description of an economic object depends upon the model.

- Example: Price of Car
  - \* In a consumer utility maximization model, the price of a car is ?
  - \* In a partial equilibrium model of the car market, the price of a car is ?
  - \* In a monopoly model, the price of a car is ?

## **5 Assumptions in Economics (Epistemology)**

- Sir Francis Bacon: Science is hypotheses which are testable using controlled experiments.
- Karl Popper: Scientific theories must be falsifiable (can not be tautologies).



- Milton Friedman (Essays on Positive Economics): Assumptions don't matter - only predictions.
- Many assumptions in economics models which are not true
  - People always do what makes them happiest
  - Ex-ante transferability of wealth
  - Supply equals demand
  - Does making these assumptions matter for our positive conclusions about how the economy works?
  - Does making these assumptions matter for our normative conclusions about how the economy should be structured?
- In this course, we will try to point out when theories are amenable to empirical verification and when they are not

- Actual Experiments: Randomized controlled trials in Behavioral Economics and Development Economics
- Natural Experiments: Do minimum wage increases cause unemployment?
  - \* Card & Krueger (1994), *American Economic Review*
- Non-Falsifiable Statements: Preferences are transitive
- Normative Theories: People are better off when ...

## 6 Feedback

- Very interested in your feedback

- Writing a new Microeconomics textbook with Suresh Naidu (Columbia University)