Syllabus and Reading List: Thinking Like an Economist

The theory of economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique for thinking, which helps the possessor to draw correct conclusions.

John Maynard Keynes (1922)

Course Description:

The philosophy underlying this course is that non-specialists can gain a facility in thinking like an economist without the need to learn elaborate economic theories or complicated mathematical techniques. The course's goal is to equip students with no prior training in economics with the intellectual skills that will enable them to think like an economist about issues that arise in the media and in everyday life. To do so requires applying a combination of rigorous logic, simple analytical tools that economists regularly use, and an understanding of which tool applies in which context. This is what it means to think like an economist.

Economics analyzes and predicts the outcomes generated by groups of interacting individuals, whether it is several friends deciding between Cornerstone and Bentley's or a whole society trying to reduce unemployment. How do economists predict what will happen as individuals make their own decisions and interact with one another? How do economists analyze whether the results are good or bad for the individuals? These are two fundamental questions that the course answers.

The course introduces the student to how economists think by focusing on case studies. The real-world examples—for example, understanding why agricultural policies in Brazil can change gas prices in College Park—motivate the way economists approach their analyses. By deliberating on issues of fundamental interest, students will become acquainted with the methodological tools of economics and see the power that these tools have to produce insightful answers. By applying a variety of tools in practical contexts, students will learn which characteristics of a problem dictate the choice and use of a particular analytical tool.

To develop their understanding, students analyze practical problems individually and in groups and learn how simple analytical tools help them interpret the world in which they live. By seeing the development of the analysis in a variety of case studies and in their own individual and group projects, students will learn how to use the analytical tools of economics in appropriate contexts—that is, to think like an economist.

Teaching assistants: Sections 0101, 0102, 0103: Ami Shrestha Sections 0104, 0105, 0106: Alejandro Graziano

Contact via ELMS.

Time & Location of Lectures: Mondays and Wednesdays, 11-11:50 PM, SHM 2102

Discussion Sections: 1 hour a week, times and locations listed on Testudo.

Peter Murrell office hours: Mondays 1:00 to 2:00

Wednesdays 9:30 to 10:30

or other times by appointment (just send an email via ELMS).

Course Objectives:

On completion of ECON 111, students will be able to:

- Make predictions about what outcomes will be generated by groups of interacting individuals in specific real-world situations.
- Analyze the characteristics of the outcomes generated by groups of interacting individuals from a normative perspective.
- Exhibit knowledge of the most common analytical tools that economists use.
- Identify specific situations to which common tools of analysis can be productively applied.
- Identify the characteristics of real-world situations that make each of the tools applicable.
- Show how to use these tools in a context of the student's choosing.
- Identify classes of problems that lead to difficulties when examining empirical relationships.
- Understand how the models and analytical methods of economics can be used to extract causal relationships from data.
- Understand how the varied tools of economic analysis all reflect the application of the core methodological principles of economics.
- Demonstrate how the methods of economics provide a practical way to analyze core problems of everyday life and problems in public policy.

Prerequisites: None

Course Web Site: https://myelms.umd.edu/ and then login with your university id and password, and look for "ECON 111" under "Courses & Groups"

Communication: To reach Professor Murrell or either TA send a message within ELMS. For consistency and record keeping, we will only respond to messages within ELMS, not to messages to our regular email addresses.

Required course aids: None. Numerical problems are all simple; no calculators are needed.

Attendance policy:

- 1. Each student can choose whether to attend lectures or not. Original material will be presented in lectures that is not covered in the readings nor in the lecture notes that will be posted.
- 2. Participation in discussion sections is rewarded. (See below.)

Readings: No textbook is assigned. Readings, videos, and audios are assigned to each topic and have been uploaded to ELMS. See the course outline below for specific details.

Discussion sections:

The purpose of the discussion sections is to enable you to ask questions easily about the course material, to facilitate discussion of how the course material is helping you to meet the course objectives, and to allow formal conversations with your fellow students about how and when the analytical methods presented in the course can be applied to real-world phenomena.

Assessments:

- 1. Mid-term exam. Tests breadth of knowledge and understanding on all topics covered in lectures, discussion sections, and readings up to the date of the exam. (See below for date.)
- 2. Final exam. Tests breadth of knowledge and understanding on all topics covered in lectures, discussion sections, and readings after the mid-term. (See below for date.)
- 3. General participation in discussion sections. Participation includes asking pertinent questions, contributing actively in general ways, describing situations taken from the news media or everyday life that the class can analyze together, or completing small in-discussion assignments. In the first discussion section, your TA will describe how participation is to be assessed.
- 4. Pairs of students will lead a 25-minute discussion of a possible answer to one of the self-study questions posed in lectures, which will encompass fellow students asking questions and critiquing the student's approach to answering the question.
- 5. Each student will write a short paper analyzing an article from the news media that was published (in print or on the web) after December 10th 2015. The article must be such that the student can use the analytical materials developed in the course to analyze the article. The goal of the paper will be to 'think like an economist' about the article, criticizing or supporting or extending the conclusions reached in the article, using the analytical tools developed in the course. The paper will be graded for accuracy, completeness, written expression, originality, and how well it demonstrates an understanding of the course material. The due date and time for the paper is 4:00pm on the University's official last class day of the semester—Tuesday May 10th 2016. Grades for papers handed in after this time will be reduced by one-third of a letter grade for each 12 hours that the paper is late.

Interpreting the assignments

Items 1-2 test individual breadth of knowledge and understanding
Items 3-4 assess the student's contributions to participatory activities
Item 5 examines whether students can use economic analysis to understand real-world problems.

Contribution of each assessment to the final grade:

1.	Mid-term exam.	25%
2.	Final exam.	25%
3.	General participation in discussion sections.	10%
4.	Leading discussion of answer to self-study questions	15%
5.	Paper.	25%.

Grading Scale

For important information on how assessments are administered, please review the detailed elaboration of course policies in the last two pages of this syllabus.

Notes on readings, videos, and audios:

- 1. As you glance below, do not become daunted by the number of items. Most readings and videos/audios are short. Assignments average less than 22 pages of reading a week and less than 16 minutes of video/audio a week.
- 2. Use the files for the readings, videos, and audios that are posted on ELMS. In many cases, these are either shorter versions of the originals or annotated versions of the originals, to make your studying attuned to the needs of this course. For brevity, the reading list provides the names of the original articles only, which are virtually identical to the names of the files on ELMS. Information on original sources can be found within the ELMS files themselves.

COURSE OUTLINE

All dates for the coverage of course sections are approximate. Announcements in class and on ELMS will make clear when we have finished one section of the course and are moving onto another.

1. January 25 Introduction to the course and its logistics

Readings Graphs in Economics

The Accidental Theorist, Slate Jan 23, 1997

The Moral Heart of Economics, NY Times, Jan 25, 2011

Multimedia Video: Graph Review

2. January 27 Case study: The development of public policy on

child seats on airplanes

Concepts and techniques Decision-making, theories, models, equilibrium, and counterfactuals

Readings Unintended Consequences, Freakonomics, NY Times, Jan, 2008

Driven to destruction, Tim Harford, FT, Feb 2006

The Power of Stories Over Statistics, Thomas Newman *BMJ* 2003 Pressure Rises For Baby Seat On Airplanes, *NY Times*, Aug, 2004

Press Release – FAA Announces Decision on Child Safety Seats, FAA 2005 The time has come for child seats on airplanes, *USA Today*, Feb, 2011

Multimedia Video: Models and Theories

Video: Why Model, Scott E. Page

Video: Intelligent Citizens of the World, Scott E. Page

3. February 1 to February 8 Case study: global markets for grain and for energy.

Fundamentals of modeling and theorizing. How to analyze markets.

How markets work.

Concepts and techniques Supply, demand, equilibrium, invisible hand, comparative statics,

counterfactual thinking

Readings: demand The Use of Graphs In Economic Analysis, Peter Murrell

Demand.pdf

Can vegans stomach the unpalatable truth about quinoa?, The Guardian,

Jan, 2013

Multimedia: demand Video: Demand – Economic Lowdown Video Series from FRB of St Louis

Readings: supply Supply.pdf

It's OK to eat quinoa Slate Jan 2013

Multimedia: supply Video: Supply – Economic Lowdown Video Series from FRB of St. Louis

Readings: equilibrium The Reality of Markets, Russell Roberts

Supply Demand and Marriage, *NYTimes* Aug, 2011 US corn ethanol fuels food crisis in developing

countries, *Al Jazeera* Oct. 2012 Risks of Cheap Water *NY Times* Oct 2014

1973 oil crisis, Wikipedia

Multimedia: equilibrium Video: Equilibrium – Economic Lowdown Series from FRB of St. Louis

Video: TED Talk – Employing the invisible hand to reduce traffic jams

4. February 10 to February 17 Case study: global markets for grain and for energy, continued.

Efficiency, externalities and public policy.

When markets can be helped. How taxes can help markets work.

Concepts and techniques Efficiency, counterfactual thinking, government intervention in

functioning of markets, externality, tax

Readings The invisible hand: potatoes and gasoline, NY Times, May, 2008

When markets do not work well: negative externalities from driving,

Freakonomics, NY Times, April, 2008

Taxes to make markets work well, New Yorker, Dec , 2012

Building a Green Economy, NY Times, April, 2010

A Modest Proposal To Deregulate Infant Adoptions, Donald Boudreaux

Multimedia Video: Externalities

Video: Analysis of the eBay Kidney Auction, MIT Open courseware

5. February 22 to February 29 Case study: games and the tragedy of the commons

Concepts and techniques Game theory, Nash equilibrium, prisoner's dilemma, coordination games,

Readings Prisoner's dilemma, Wikipedia

UMD professor asks cruelest extra credit question ever, WUSA.com,

July 2015

Aquifers: Deep waters, slowly drying up, The Economist, Oct 7 2010

Debris in space: Flying blind, The Economist, Feb 19 2009

Lawyers, dispute resolution, and prisoner's dilemma, ECON 111 note Fishing and conservation: A rising tide, *The Economist*, Sep 18 2008

Climate Deal Badly Needs a Big Stick, NYTimes June 2015

How Networking Influences What We Speak, Freakonomics June 10 2008

Multimedia Video: Prisoner's dilemma and Nash equilibrium, Khan Academy

Video: Prisoner's dilemma: Split or Steal Video 1

Video: A practical use for game theory, *Economist*, Sept 7 2011

Video: Prisoner's dilemma: Split or Steal Video 2

6. March 2 to March 9 Case study: games over time and economic institutions

Concepts and techniques Sequential games, backward induction, institutions of contract and

property, commitment

Readings Applying game theory to negotiations, ECON 111 note

Addicted to your phone? There's help for that. *NY Times*, July 2015. To Prove You're Serious, Burn Some Bridges, *NY Times* Oct 17 2005

The stickK dot com tour

Multimedia Audio: Save Me From Myself, Freakonomics Podcast, WNYC, Feb 2 2012

March 14 and March 16 Spring Break

Monday, March 21 MID-TERM EXAM

This is a Major Scheduled Grading Event

7. March 23 to March 30 Case Study: Modeling chance events: health statistics

Concepts and techniques Chance events, conditional distributions, probability, and Bayes rule

Readings Does the NFL have a crime problem, BBC, July 8 2013

Are you more likely to die on your birthday, *BBC*, June 29 2012 Amanda Knox and bad maths in court, *BBC*, April 27 2013

Chances Are, NY Times, April 25 2010

Breast Cancer Screenings - What We Still Don't Know *NYTimes* Dec 2013 Universal Mammograms Show We Don't Understand Risk *NY Times*, May

2014.

Multimedia Video: Don't Be Fooled By Bad Statistics, Emily Dressler

Video: Hans Rosling, Religions and babies, TED Talk

Video: The Monty Hall Problem, Ron Clarke

8. April 4 to April 11 Case study: Making systematic deductions from data: why

econometrics is good for your health

Concepts and techniques Causality, missing variables, reverse causality, selection, natural

experiments

Readings Correlation does not imply causation, Wikipedia

Regressions An Economist Obsession, IMF 2012

Natural experiment, Wikipedia

Correlation and causality TimHarford.com April 2015

At Voice Charter School in Queens, Students Have Outperformed Their

Peers Academically - NYTimes Dec 2014

Why Do Music Students Have Higher SAT Scores, Pacific Standard, May,

2013

Music and Success NYTimes Dec 2013.pdf

Alcoholics Anonymous and the Challenge of Evidence-Based Medicine,

NYTimes, April 2015

Multimedia Video: Correlation and Causality, Khan Academy

Video: Correlation vs. Causality, Freakonomics

Video: Meaningless and meaningful correlations, Open University

9. April 13 to April 20 Modeling the aggregate economy. Case study: getting into the current

recession and its effects

Concepts and techniques GDP, price indexes, national income accounting, Macroeconomic policy,

Keynesian and neoclassical macroeconomics

Readings Measuring Total Output and Income, Principles of Macroeconomics

US Economy Grinds To Halt As Nation Realizes Money Just Shared

Illusion, Onion Feb 16, 2010

Baby-Sitting the Economy, Slate Aug 1998

Beanie Babies bubble: Economics and psychology of a plush toy

investment craze, *Slate* Feb 2015 Crash course, *Economist*, Sept 2013 Lending weight, *Economist*, Sept 2013

The Financial Meltdown Now and Then, Freakonomics May, 2009

Multimedia Video: Inflation and Price Indexes

Video: Real Income Video: Unemployment

10. April 25 to May 2

Modeling the aggregate economy. Case study: getting out of the current recession; political and economic controversies

Concepts and techniques

Fiscal Policy, monetary policy, austerity, zero-lower bound

Readings

Monetary Policy and the Economy, The Federal Reserve Board Automatic Stabilizers, *The American Prospect*, March 2013

Controlling interest. *Economist*, Sept 2013 Sovereign doubts. *Economist*, Sept 2013

Why do people hate deficits. Washington Post April 2013

No short cuts, The Economist, Oct 27th 2012

How the Case for Austerity Has Crumbled, NY Review of Books June

2013

University of Hard Knocks, *The American Prospect*, Nov 2012

11. May 4 to May 9 Case Study: Modeling information asymmetry--adverse selection and

moral hazard, with applications to insurance

Concepts and techniques Information asymmetry, adverse selection, Moral hazard

Readings The lemon dilemma, Economist, Oct 2001

Moral hazard, Wikipedia

Moral Hazard: A Tempest-Tossed Idea, NY Times Feb 2012

Insurance, The Concise Encyclopedia of Economics

For Obamacare to Work, Everyone Must Be In, *NYTimes*, Aug 2013 The Affordable Care Act, *JAMA Internal Medicine Blog*, May 2014

Insurance and murder in Liverpool, Economist, Sep 2002

Multimedia Video: Adverse Selection, Financial Access Initiative

Video: Moral Hazard, Financial Access Initiative

Audio: Moral hazard & Sandy relief: Do federal funds invite disaster?

WHYY, Feb 26, 2013

Tuesday, May 10 4:00pm. Paper is due.

Completion by this time is viewed as a Major Scheduled Grading Event.

Saturday, May 14 FINAL EXAM 8:00am-10:00am

(This is the official time, but exam won't last the full 2 hours.)

This is a Major Scheduled Grading Event

Course Policies:

Please read through this section of the syllabus at the beginning of the semester and refer to it again throughout the semester, particularly in advance of exams and assignment due dates.

Additional notes on assessments:

- 1. A policy of the Department of Economics on grading requires instructors to use the grading system announced at the beginning of the semester in all cases and with no exceptions. There will be no opportunities for extra credit. (This is an "institution". The logic of institutions will be explained in the course.)
- 2. University policy regarding the circumstances in which professors are obliged to provide make-up examinations is available online at www.inform.umd.edu/ugradcat/
- 3. If you have questions or concerns about a grade awarded for any specific assignment, you should first discuss your questions or concerns with your TA. Then, if you still feel your grade is inappropriate, you can submit a written request for a grade review to Professor Murrell via ELMS. Send an email that describes your concerns in detail. After consultation with the TA, Professor Murrell will then regrade the relevant assignment, taking into account your concerns. This process should be started in a timely fashion so that any formal request for a grade review must be submitted within 10 days of the date when grades for that assignment are posted on ELMS

<u>Disability Support Services:</u> If you have a documented disability that requires academic accommodations for test taking or other needs, please provide your TA with documentation from Disability Support Services (301-314-7682). We are not able to accommodate students who are not registered with DSS or who do not provide the documentation at least one week in advance of exams and deadlines. Complete information about disability support services and accommodations are available online at www.counseling.umd.edu/DSS/receiving_serv.html.

<u>Academic Integrity</u>: The University's code of academic integrity is designed to ensure that the principle of academic honesty is upheld. Any of the following acts, when committed by a student, constitutes academic dishonesty:

- CHEATING: intentionally using or attempting to use unauthorized materials, information, electronic items, or study aids in an academic exercise.
- FABRICATION: intentional and unauthorized falsification or invention of any information or citation in an academic exercise.
- FACILITATING ACADEMIC DISHONESTY: intentionally or knowingly helping or attempting to help another to violate any provision of the University's code of academic integrity.
- PLAGIARISM: intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise.

The Honor Pledge is a statement students are asked to sign on examinations, papers, or other academic assignments. The Pledge reads: *I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination.*

The Code of Academic Integrity sets standards for academic integrity at Maryland for all undergraduate and graduate students. Students are responsible for upholding these standards for this course. It is very important for students to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit http://www.shc.umd.edu/SHC/Default.aspx

Religious Observance

If participating in a religious observance will result in conflicts with completion of compulsory requirements at any time during the semester, please provide your Teaching Assistant with a written list of the dates you will need to be absent before the end of your second discussion section of the semester. We will make certain that you are not disadvantaged because of your absence. University policy regarding religious observance is available online at www.president.umd.edu/policies/docs/iii 510a.pdf

Absence Policy:

In accordance with university policy, absences that prevent attendance at a major scheduled grading event will require either (i) written documentation from an appropriate health care provider/organization or (ii) advance notice in writing of a religious observance or University-sanctioned event. Make up exams and extensions of deadlines for writing assignments and oral presentations will be given only when the student has complied with these requirements. If a major scheduled grading event is to be missed for a reason known beforehand, the student must contact his or her Teaching Assistant prior to the scheduled date. If a major scheduled grading event is missed due to unforeseen circumstances on the scheduled date, the student (or family member in extreme circumstances) must contact the Teaching Assistant within 24 hours of the missed exam/deadline. Official documentation of the excuse must be provided. In this course, we will NOT accept a Health Center honor statement to verify illness. If a student misses an exam or assignment deadline for any unauthorized reason, he/she will receive a grade of zero for that exam. For information on the university's absence policy see:

http://www.umd.edu/catalog/index.cfm/show/content.section/c/27/ss/1584/s/1540.