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 choosing between Starbucks and Chipotle 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 the two fundamental questions that the course answers.

The course introduces students to how economists think by focusing on real-world examples. By deliberating on issues of direct interest, students will become acquainted with the methodological tools of economics and see the power that these tools have to produce insightful answers. To develop their understanding, students analyze practical problems individually and in groups and learn how simple analytical tools can help them interpret the world in which they live—that is, to think like an economist.

Time & Location of Lectures: Mondays and Wednesdays, 2:00-2:50 PM, TYD 1102.
Discussion Sections: 50 minutes a week; Fridays 9, 1, or 2, TYD 1102.

Peter Murrell office hours: Given the convenience of Zoom, and scheduling office-hour sessions using ELMS, I will hold my 'statutory' two office hours on Zoom, Tuesdays 2:30-3:30 and Wednesdays 3:15-4:15. For your convenience, I will use the ELMS calendar function to divide these office hours into 10-minute segments, which you can then reserve. However, these are just my 'statutory' office hours. I am available at many other times and if you send me an email to coordinate on time, I will usually be able to Zoom at some time the same day. If you want to meet me in my office in Tydings, send me an email and we can coordinate on a time

Teaching assistant: Jonathan Yu
                    Contact via ELMS.

Jonathan Yu office hours:
                    Wednesdays, 2-3pm, Zoom; Fridays 10-11am, in office.

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://umd.instructure.com/courses/1309571.

Communication: To reach Professor Murrell or the 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. Attendance in lecture sessions (Mon-Weds) is not mandatory. Each student can choose whether to attend or not.
2. Participation in discussion-section sessions (Fridays) is not mandatory but is directly rewarded in participation and presentation credits. (See below.)

Readings, multimedia: 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. Three exams of equal length. Tests breadth of knowledge and understanding on all topics covered in lectures, discussion sections, and readings/multimedia up to the date of the exam. (See below for dates.)
2. Participation in discussion sections. In the first discussion section, your TA will describe how participation is to be assessed.
3. In discussion sections, pairs of students will lead a 20-minute presentation of a possible answer to one question from a list of self-study questions that will be given to the class. Fellow students will be expected to ask questions and critique the presenters' approach to answering the question.
4. Each student will write a short paper analyzing a media article that was published after January 1st 2021 and has as its central subject the COVID-19 pandemic. 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 due date and time for the paper is 4:00pm on the University's official last class day of classes—Monday December 13th, 2021. Grades for papers handed in after this time will be reduced by one-half of a letter grade for each 12 hours that the paper is late.

Interpreting the assignments
Item 1 tests student knowledge and understanding of the basic course material.
Items 2 and 3 assess the student's ability to work in groups to solve problems.
Item 4 examines whether students can use economic analysis to understand real-world problems.

Contribution of each assessment to the final grade:
1. Exams.	50%
2. Participation in discussion sections.	10%
3. Presentation during one meeting of discussion section.	15%
4. Paper.	25%.

Grading Scale
$100.0 \geq \%$ score $\geq 96.66 \rightarrow$ A+ $96.66 > \%$ score $\geq 93.33 \rightarrow$ A $93.33 > \%$ score $\geq 90.00 \rightarrow$ A-
$90.00 > \%$ score $\geq 86.66 \rightarrow$ B+ $86.66 > \%$ score $\geq 83.33 \rightarrow$ B $83.33 > \%$ score $\geq 80.00 \rightarrow$ B-
$80.00 > \%$ score $\geq 76.66 \rightarrow$ C+ $76.66 > \%$ score $\geq 73.33 \rightarrow$ C $73.33 > \%$ score $\geq 70.00 \rightarrow$ C-
$70.00 > \%$ score $\geq 66.66 \rightarrow$ D+ $66.66 > \%$ score $\geq 63.33 \rightarrow$ D $63.33 > \%$ score $\geq 60.00 \rightarrow$ D-
$60.00 > \%$ score $\rightarrow$ F

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

A note on readings, videos, and audios:
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.

COURSE OUTLINE

1. The number of classes assigned to each topic is approximate. A schedule on ELMS will be updated each week to keep you informed of where we are in the course.
2. Exam dates are fixed.
3. Readings, multimedia marked with a * are basic, introducing fundamentals. Readings, multimedia not marked with a * are applications.

1.   **Introduction to the course and its logistics**

Readings, multimedia   *Graphs in Economics
                        *Video: Graph Review
                        The Accidental Theorist, *Slate* Jan 23, 1997
                        The Moral Heart of Economics, *NY Times*, Jan 25, 2011

2.   **Case study: The development of public policy on
                                                            child seats on airplanes**

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

Readings, multimedia   *Video: Models and Theories
                        *Video: Why Model, Scott E. Page
                        *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

3. **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, multimedia   *The Use of Graphs In Economic Analysis, Peter Murrell
*Demand.pdf
*Video: Demand – Economic Lowdown Video Series from FRB of St Louis
*Supply.pdf
*Video: Supply – Economic Lowdown Video Series from FRB of St. Louis
*Video: Equilibrium – Economic Lowdown Series from FRB of St. Louis
*The Reality of Markets , Russell Roberts
Can vegans stomach the unpalatable truth about quinoa?
The Guardian, Jan, 2013
Against the grain *Economist* May 2016
Supply Demand and Marriage, *NYTimes* Aug, 2011
Broadway Tickets, for Price of an Economics Lesson, *NY Times* June 2017
Risks of Cheap Water *NY Times* Oct 2014
Video: TED Talk – Employing the invisible hand to reduce traffic jams
1973 oil crisis, *Wikipedia*

4. **Global markets for grain and for energy, continued.**
Efficiency and when markets work well.
Externalities and 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, multimedia   *The invisible hand: potatoes and gasoline, *NY Times*, May, 2008
*Video: Externalities
*Polluting Farmers Should Pay, *NY Times*, 2018
Building a Green Economy, *NY Times*, April, 2010
How to design carbon taxes, *Economist* 2018.
Video: Analysis of the eBay Kidney Auction, MIT Open courseware
A Modest Proposal To Deregulate Infant Adoptions, Donald Boudreaux
"Sin" taxes are less efficient than they look, *Economist*, 2018

5.   **When markets need more than prices to convey information. Modeling information asymmetry.**

Concepts and techniques   *Information asymmetry, adverse selection, moral hazard, insurance*

Readings, multimedia   *Insurance, The Concise Encyclopedia of Economics
*Video: Adverse Selection, Financial Access Initiative
*Why Health Care Policy Is So Hard - *NY Times* July 2017
For Obamacare to Work, Everyone Must Be In, *NYTimes,* Aug 2013
Secrets and agents *Economist,* July 2016
*Moral hazard, *Wikipedia*
*Video: Moral Hazard, Financial Access Initiative
Moral Hazard: A Tempest-Tossed Idea, *NY Times* Feb 2012
Insurance and murder in Liverpool , *Economist*, Sep 2002
A.I. Is Changing Insurance, *NYTimes,* 2019

Monday, October 4   **FIRST EXAM
This is a Major Scheduled Grading Event
See work schedule for topics to be covered in the exam.**

6.   **Games and the tragedy of the commons**

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

Readings, multimedia   *Prisoner's dilemma, *Wikipedia*
*Video: Prisoner's dilemma and Nash equilibrium, Khan Academy
Aquifers: Deep waters, slowly drying up, *The Economist*, Oct 7 2010
Debris in space: Flying blind, *The Economist*, Feb 19 2009
How Dwindling Fish Stocks Got a Reprieve, *NYTimes* April 2016
Climate Deal Badly Needs a Big Stick, *NYTimes* June 2015
Political economy suggests that geoengineering is likely, *Economist* 2019
Video: Prisoner's dilemma: Split or Steal Video 1
Video: Prisoner's dilemma: Split or Steal Video 2
*Coordination games, *Wikipedia*
How Networking Influences What We Speak, *Freakonomics* 2008

7.   **Games over time, economic institutions, and personal commitments**

Concepts and techniques   *Sequential games, backward induction, institutions of contract and property, commitment*

Readings, multimedia   *Sequential_Games_Policonomics
*To Prove You're Serious, Burn Some Bridges, *NY Times* Oct 17 2005
Spurning Erdogan's Vision, Turks Leave in Droves, *NY Times* 2019.
Addicted to your phone? There's help for that. *NY Times*, July 2015.
The stickK dot com tour
Audio: Save Me From Myself, Freakonomics Podcast, *WNYC*, 2012

Monday, November 8   **SECOND EXAM**
This is a Major Scheduled Grading Event
See work schedule for topics to be covered in the exam.

8.   **Modeling when there is uncertainty: health information**

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

Readings, multimedia   *Chances Are, *NY Times*, 2010
*How to understand Covid-19 testing in 10 steps, *Guardian*, 2020
*Mammograms Show We Don't Understand Risk *NY Times*, 2014.
Screening for lung cancer is a controversial idea, *Economist*, 2019.
Can wearing your heart (monitor) save your life? *Economist*, 2019.
Amanda Knox and bad maths in court, *BBC*, 2013

9.   **Avoiding common pitfalls in interpreting patterns in data**

Concepts and techniques   *Organization of data, causality, omitted variables, selection on unobservables, reverse causality*

Readings, multimedia   *Video: Don't Be Fooled By Bad Statistics, Emily Dressler
*Does the NFL have a crime problem? *BBC*, July 8 2013
*Are you more likely to die on your birthday? *BBC*, June 29 2012
*Correlation does not imply causation, *Wikipedia*
*Correlation and causality *TimHarford.com* April 2015
Video: Correlation vs. Causality, *Freakonomics*
Why Do Music Students Have Higher SAT Scores, *Pacific Standard*, 2013
Video: Meaningless and meaningful correlations, Open University

10.   **Finding Causality: why econometrics is good for your health**

Concepts and techniques   *Causality, RTC's, lab experiments, field experiments, natural experiments*

Readings, multimedia   *Natural experiment, *Wikipedia*
*Music and Success, *NYTimes* 2013
*Workplace Wellness Programs Don't Work Well, *NY Times* 2018
*AA and the Challenge of Evidence-Based Medicine, *NYTimes,* 2015
*Coronavirus Researchers Can Learn From Economists, NY Times, 2020
Fox News Exerts More Power Than You Might Think, *Slate*, 2016

Monday December 13th   **4:00pm. Course paper is due.**
Completion by this time is viewed as a Major Scheduled Grading Event.

Saturday December 18th   **FINAL EXAM 1:30pm-3:30pm**
(This is the official time, but exam will not last the full two hours.)
This is a Major Scheduled Grading Event.
See work schedule for topics to be covered in the exam.

Course Policies:
Policies relevant to ALL Undergraduate Courses are found here:
http://ugst.umd.edu/courserelatedpolicies.html. Topics addressed include academic integrity,
student and instructor conduct, accessibility and accommodations, attendance and excused
absences, grades and appeals, copyright and intellectual property. Every student is expected to
understand and uphold these policies, which elaborate both your rights and your responsibilities:
ignorance of the policies is not an acceptable excuse. In particular, in order to make sure you do
not violate any specific policies of this course, you should understand the full content of the
following sections of the standard policies:
Academic Integrity
Acceptable Use of Technology
Student Conduct
Accessibility
Official Communication
Copyright and Intellectual Property
Attendance and Missed Assignments. This policy contains the following sentences: "The student
must provide appropriate documentation of the absence. The documentation must be provided in
writing to the instructor by the means specified in the syllabus." For this course, the required
method is an ELMS email to both the relevant TA and Professor Murrell, with a picture of
original documentation attached to the email if appropriate.

Additional policies specific to this course:
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.
You should start the process in a timely fashion so that any formal request for a grade review is
submitted within 7 days of the date when grades for that assignment are posted on ELMS.

These are special times:
To find out more information about COVID-19 Related Disability Accommodations & Requests
for Consideration, go to https://umd.edu/virusinfo/emails/063021-2.
To find Additional UMD COVID-19 Guidance, especially about masking policy, go to
https://umd.edu/virusinfo/emails/081921

*There is an easy way to find answers in cases where you do not understand what these policies
entail for you: ask your TA or Professor Murrell.*

The web site http://www.ugst.umd.edu/courserelatedpolicies.html also contains information
about your rights concerning the conduct you can expect from your TA's and Professor Murrell.
To obtain all that you are entitled to, familiarize yourself with that information. Students will
also find on this page information about valuable resources to support academic success in this
course, as well as overall health and well-being.