

# **Syllabus: ECON 190F**

**Fall 2019**

## **Thinking Through Models**

Faculty: Jason Brent      Meeting Times: T-Th (1:25-2:40, Social Sciences 109)

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### **1. Overview of the Course**

Models of agents, behaviors, mechanisms and markets are essential to the way economists think about and describe the world. This course examines several of the models that have been most crucial to the development of economic thought from the early nineteenth century through to the present. Students will learn to understand how economists have used models as tools of inquiry and prediction, assess the functional elements of these models and consider how accurately they map on to the empirical phenomena they describe.

### **2. Course Objectives**

This course is designed to develop your literacy in economic models, writing and arguments. By working with these key historical models, you will learn to read, understand and assess them critically, both in the context of their development and as working intellectual objects. This will equip you with sophisticated tools to help you to begin to understand how to assess modeling as one of the central tools in the discipline of economics.

Upon successful completion of this course, each student will:

1. Be able to identify the key elements in each economic model we cover in the course and the argument or analysis the model is intended to convey.
2. Be able to identify the time during which each model originated and key elements of the story behind its creation.
3. Be able to identify ways in which the model continued to be used for its original purpose or evolved to be used in other ways.
4. Be able to use writing and speaking skills to express well-reasoned economic arguments clearly and concisely.
- 5. Be able to analyze economic models and concepts in order to understand, explain and critique them as analytic tools.**

**At its core, this is a course in economic reasoning. You are certainly intended to acquire knowledge of the history of the discipline of Economics, but much more importantly it is the goal of this course to unlock your economic reasoning skills in ways that will be useful to your historical understanding as well as to your contemporary and future analysis.**

### **3. Written Assignments**

There will be one major three-part essay assignment for this course. In both the first and second half of the semester you will write a detailed assessment of one of the models covered in the course. For the third and final essay you will write a critical comparison of the two models. I will provide a more complete rubric of this entire process once we start the class.

#### **4. Reading Response Blog**

Each student will be required to post a blog response to a specific question based on the required reading for each class at the beginning of the week. Response are **due by five pm** each Monday for which the reading response is assigned. An effective blog response should be at least 2 to 3 paragraphs. **Blog Questions will be posted by 5 pm each Friday on my blog on Sakai.**

#### **5. Attendance/Classroom Rules**

This class is designed to be a collaborative exercise. Every student should come to class prepared to participate in the day's discussion. Unless you have a documented learning need for the use of a laptop, **the use of laptops, phones, or any other electronic device is prohibited during class.**

##### **A) Disabilities**

If any student requires assistance or appropriate academic accommodations for a disability, please contact me after class, by email, during office hours or by individual appointment. You must have established your eligibility for disability support services through the Division of Student Affairs, Disability Services.

##### **(B) Grading**

1. **Reading Responses (10 Percent):** Grades will be awarded on the basis of 0 for no response, 2-3 for a late response (within one week) or one with obviously inadequate effort, and 4-5 for any reasonable effort. Blog posts will **not** be graded

for correctness or accuracy. Students may drop one grade for the semester's blog responses.

## **2. First Two Model Analyses (20 Percent Each):**

Two 4-5-page papers each analyzing one of the models we cover in the course. A more detailed rubric will follow, but you will be responsible for describing the models in detail, explaining the key predictions or uses of the model and then analyzing the relationship between the modeling choices and its ultimate purposes.

**3. Debate Assignment (20 Percent):** During the semester there will be several debates on issues concerning the use of specific economic models and the more general role of models in the profession. Grades will be assigned to judges on the quality of their written outlines in addition to their actual debate participation. You will be assessed primarily on the strength of your ideas rather than on your ability or style as a speaker. A more detailed rubric will be provided prior to the first debate session.

**4. Final Essay (30 Percent):** Your final paper will be a 10-12-page paper which represents an original critical comparison of two of the models covered in the course. Again, a more detailed rubric will be provided later.

## **(C) Regrade Requests**

1. All regrade requests must be made within one calendar week (7 days) of the assignment being returned.
2. All regrade requests must be made at least 24 hours *after* the assignment has been returned. I want you to take time to think about the feedback rather than reflexively asking for a higher grade. The time to come and talk to me is *while*

*you are working on the assignment* in order to get working feedback on your ideas.

3. In all cases, I reserve the right to regrade your entire assignment, so there is always a possibility that regrading will lower your grade.

## **Readings:**

During the semester I will post additional readings and resources at least in part in response to how our discussions evolve and what subjects emerge as being of greatest interest to the class. We will also essentially use as a textbook a remarkable book on history, methods and theory in economics:

Morgan, Mary. (2012). *The World in the Model: How Economists Work and Think*. Cambridge: Cambridge University Press.

I will be working from the Kindle edition, but it will be fine for you to use it in whatever form you prefer. However, you will need to have a copy of your own.

## **Weekly Schedule:**

Please complete the readings before the designated week:

### September 3<sup>rd</sup> & 5<sup>th</sup>:

Morgan, Chapter 1: Modelling as a Method of Enquiry

3<sup>rd</sup>: Part I, Changing the Practice of Economic Science

5<sup>th</sup>: Part II, Making Models, Using Models

September 10<sup>th</sup> & 12<sup>th</sup>:

Morgan, Chapter 2: Model-Making: New Recipes, Ingredients, and. Integration

10<sup>th</sup>: Parts 1-3

12<sup>th</sup>: Parts 4-5

September 17<sup>th</sup> & 19<sup>th</sup>:

Morgan, Chapter 3: Imagining and Imaging: Creating a New Model World

17<sup>th</sup>: Parts 1-5.i

19<sup>th</sup>: Parts 5.ii-8

September 24<sup>th</sup> & 26<sup>th</sup>:

Morgan, Chapter 4: Character Making: Ideal Types, Idealization, and the Art of Caricature

24<sup>th</sup>: Parts 1-4

26<sup>th</sup>: Parts 5-8

October 1<sup>st</sup> & 3<sup>rd</sup>:

Morgan, Chapter 5: Metaphors and Analogies: Choosing the World of the Model

& Chapter 6: Questions and Stories: Capturing the Heart of Matters

1<sup>st</sup>: Chapter 5, Parts 1-4

3<sup>rd</sup>: Chapter 5, Part 5; Chapter 6, Parts 1-2

October 10<sup>th</sup>:

Morgan, Chapter 9: Model Situations, Typical Cases, and Exemplary Narratives

10<sup>th</sup>: Game Theory Fundamentals and Parts 1-3

October 15<sup>th</sup> & 17<sup>th</sup>:

Morgan, Chapter 9: Model Situations, Typical Cases, and Exemplary Narratives

15<sup>th</sup>: Parts 4-5 & Real-Life Applications

17<sup>th</sup>: Repeated Games: Analysis and Strategic Implications

October 22<sup>nd</sup> & 24<sup>th</sup>:

Models of Returns to Education: Human Capital vs. Signaling

22<sup>nd</sup>: Weiss, A. (1995). Human capital vs. signalling explanations of wages. *The Journal of Economic Perspectives (1986-1998)*, 9(4), 133. Retrieved from <https://login.proxy.lib.duke.edu/login?url=https://search-proquest-com.proxy.lib.duke.edu/docview/208937135?accountid=10598>

24<sup>th</sup>: Bedard, K. (2001). Human Capital versus Signaling Models: University Access and High School Dropouts. *Journal of Political Economy*, 109(4), 749-775. doi:10.1086/322089

October 29<sup>th</sup> & 31<sup>st</sup>:

Models of Returns to Education: Human Capital vs. Signaling

29<sup>th</sup>: Acemoglu & Autor: Human Capital and Signaling, Chapter 2

31<sup>st</sup>: Acemoglu & Autor: Externalities and Peer Effects, Chapter 3

Access via: [Acemoglu and Autor, Labor Economics](#)

November 5<sup>th</sup> & 7<sup>th</sup>

Models in Game Theory. Access via:

[https://www.maa.org/sites/default/files/pdf/ebooks/GTE\\_sample.pdf](https://www.maa.org/sites/default/files/pdf/ebooks/GTE_sample.pdf)

5<sup>th</sup>: Chapter 1 and some Game Theory History.

7<sup>th</sup>: Chapter 2 and additional Games.

### November 12<sup>th</sup> & 14<sup>th</sup>

#### Coase Theorem and its Consequences

12<sup>th</sup>: Coase Theorem. You can access the original paper, “The Problem of Social Cost” here:

<https://www2.econ.iastate.edu/classes/tsc220/hallam/Coase.pdf>

14<sup>th</sup>: A behavioral look at the Coase Theorem in action.

Kahneman, et al in Resources on Sakai.

### November 19<sup>th</sup> & 21<sup>st</sup>

#### Behavioral Economics

19<sup>th</sup>: The starting point: Kahneman and Tversky (1979, Econometrica) “Prospect Theory: An Analysis of Decision Under Risk.”

21<sup>st</sup>: A fun and important later contribution: Della Vigna and Malmendier (2006, AER) “Paying Not to Go to the Gym.”

### November 26<sup>th</sup>

A critique of the limitations of modeling and data in directing economic policy and planning

26<sup>th</sup>: Hayek (1945, AER) “The Use of Knowledge in Society” (In Resources)

