

Haverford College - Department of Economics
ECON 201 — ANALYTIC METHODS FOR ECONOMICS
Fall Term 2020

SYLLABUS

Course Description

This course is designed for students who are interested in focusing on economics as a field of study. The course explores several foundational models to help us to organize our thoughts about the nature of interactions between various actors in the economy. In exploring these models, we will develop several tools that are commonly used in the study of economics. The course is split evenly between topics in microeconomic (first half) and macroeconomic (second half). Since mathematics has become indispensable in the study of modern economics, we will make significant use of the mathematical tools of optimization.

Instructors

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Texts

- Walter Nicholson & Christopher Snyder, *Intermediate Microeconomics and Its Applications*, 12th edn, 2016.
- Marginal Revolution University free online videos: [Principles of Economics: Macroeconomics](#)

Prerequisites

ECON 104/5/6, MATH 105 or 118 or placement into MATH 121 (or higher).

Format

This course will be taught using a ‘flipped classroom’ format. There will be approximately three hours of instruction per week. Students will watch roughly two hours worth of recorded content each week, and attend one synchronous one-hour problem-solving/discussion section. Sections will meet **Tuesdays 9:50-10:50am, 3:00-4:00pm and 4:10-5:10pm**. Prof Parameswaran’s sections will all be conducted online. Prof. Binder will teach the morning section online and the afternoon sections in person. Students are expected to have appropriately engaged with the lecture recordings prior to attending the problem-solving and programming sessions, and are expected to participate actively during these classes. Students can access lecture recordings, slides and course notes on Moodle.

Assessment

First half: Student evaluation will be based on 5 (weekly) problem sets (15%), a math diagnostic test (5%), a mid-term exam (20%), and class participation (10%). Problem sets received within 2 days after the due date will receive a penalty equal to 10% of the total points available. Assignments received beyond that time will be penalised 20%. Students are welcome to collaborate on problem sets and are encouraged to use the Moodle Forum to post and answer questions. The math diagnostic test will be administered during the first week of semester. The midterm will be held on Friday October 24.

Second half: Attendance, participation, and daily homework (20%), quiz (5%), presentation (10%), term paper (15%). A more detailed syllabus for the second half is available on Moodle.

Economics Question Center

Students are also encouraged to make use of the weekly [Economics Question Center](#) to ask questions and work collaboratively with peers. The EQC will be held on Tuesday and Wednesday evenings 7:30pm-9:30pm (ET) and Thursdays 10am-12pm (ET), and will be staffed by a mix of faculty and teaching assistants. I will typically be available on Tuesday evenings and Thursday mornings. Due to physical distancing requirements, the EQC will be conducted via Google Meets, and students can collaborate using Google Jamboards. See Moodle for more details.

There is also a dedicated [Google Chat room](#) for this course, which you may use to interact with me and with your peers.

Course Outline

A. MICROECONOMICS

Week	Beginning (Monday)	Lecture Recordings	Lecture Notes	Assessment (due Friday)
1	9/7	1. Calculus 2. Preferences	1 2.1	Math diagnostic
2	9/14	3. Utility Maximization 4. Comparative Statics	2.2, 2.3 2.4	Problem Set 1
3	9/21	5. Intertemporal Consumption 6. Labor Supply	3.1 3.2	Problem Set 2
4	9/28	7. Technology 8. Cost Minimization 9. Profit Maximization	4.1 4.2 4.3, 4.4, 4.5	Problem Set 3
5	10/5	10. Expected Utility 11. Risk	5.1 5.2	Problem Set 4
6	10/12	11. State Space 12. Modelling	5.3 TBA	Problem Set 5
7	10/19			Midterm exam

B. MACROECONOMICS

(See Macro syllabus for more details.)

1. The Origins of Federal Economic Statistics
2. GDP, Productivity, and Growth
3. Employment and Unemployment
4. Inflation
5. Expectations
6. Central Banks and the Taylor Rule