



## Principles of Economics

**Instructor: Prof. Gregory Fuller**

### **Introduction**

This Principles of Economics course is designed to get prospective SAIS students up to speed with the basics of economic theory that underpin the main economics courses you will take at SAIS: Intermediate Microeconomics, Intermediate Macroeconomics, International Trade Theory, and International Monetary Theory. The goal is to provide students with the core knowledge needed in these as well as more advanced economic courses at SAIS. More generally, this course will also help students become informed consumers of economically oriented news from outlets like The Financial Times, The Economist, and The Wall Street Journal. Think of this as a course in economic literacy – which then feeds into more detailed material for those who are interested.

### **Learning Objectives**

By the end of this course, you will be able to:

- Use microeconomic supply and demand analysis to assess the consequences of government policy;
- Explain consumers' and producers' decision-making processes and identify their optimal outcomes;
- Contrast the outcomes produced by different market structures;
- Define and use core macroeconomic concepts like GDP, unemployment, interest rates, and inflation;
- Show how open economies are interdependent with one another;
- Contrast major ideas about growth and intervention in the economy

### **Course Structure**

The course is broken into ten modules, each of which covers an integrated set of topics corresponding with one or several chapters from the textbook. Modules release on a weekly schedule, during which the students can watch the recorded lectures, engage in discussions, do practice problems, and ultimately complete the final assessment quiz for the week. There will also be a conventional midterm and final. Each module will open at 6:00 am on Monday morning. When the module opens, you will have access to all the lectures, problem sets (and answers), and quizzes. All required work in each module must be completed by 11:59 pm on the Sunday of the module. All times are US Eastern.

The primary content for the course is a series of recorded mini-lessons averaging about 12 minutes long. It is strongly recommended that you take notes during the lectures. Each module also comes with a set of practice problems and answers. The idea is for you to use these as a means of practicing the material and testing yourself – they are essential to your success! After the end of each module, the answers to the previous week's quiz become available (with explanations). *Make sure to go through these!* The module quizzes are effectively a form of lightly assessed practice: use them as additional preparation for the Micro and Macro finals.

Overall, the class should take up roughly 5-10 hours per week. 5 hours is about the minimum time required to complete the lectures, skim the text, briefly investigate the practice material, and take the quiz. 10 hours should provide more than enough time to answer all practice questions in more depth, re-watch tricky lessons, and engage with me or Zoe (the TA). All of the knowledge required for the quizzes and final exam will be contained in the recorded lessons – and assessments especially focus on the material also covered in the practice problems and problem sets.

There is a textbook for the course as well: N. Gregory Mankiw's *Principles of Economics*. The readings in this syllabus are based on the 7<sup>th</sup> edition of the text, which is the second-most-recent but one. You can buy the 8<sup>th</sup> edition if you like; however, it is substantially more expensive!

### Assignments and Grading

This course will be graded based on the following assignments. See the Course Outline section of this syllabus (below) for detailed descriptions of the assessments.

| Assignments          | % of Grade | Due Date |
|----------------------|------------|----------|
| Quizzes              | 30%        | Weekly   |
| Microeconomics Final | 30%        | Week 6   |
| Short Paper          | 10%        | Week 11  |
| Macroeconomics Final | 30%        | Week 12  |

### Recurring Assignments

#### Graded Quizzes

All instructional course modules include a 60-minute quiz that you must take before the module closes at the end of the week. These quizzes are comprised of a multiple-choice section and a short essay, and they will account for 30% of your final grade (or 3% each). These are meant to give you an idea where you stand after each module – and what you really need to focus on before the bigger exams.

#### Short Paper

There is a brief paper assignment due at the end of Module 10 which asks you to select a news story about an event – any event – and then use the course material to forecast the economic consequences of that event. This provides an opportunity for you to apply what you've learned in order to draw independent economic conclusions about the real world.

Using the material from both micro- and macroeconomics, evaluate the likely consequences of the event you have selected. You must apply at least two of the analytical approaches we have developed (supply/demand analysis with welfare, loanable funds, AS-AD, etc). Additionally, you must say something about each of the following variables

- a. Output (GDP)
- b. Employment
- c. Inflation
- d. Interest rates
- e. Exchange rates

Your assignment should be roughly 500 words long and must include a link to the original news source(s) used in your analysis. This counts for 10% of your final grade and is due at the end of week 11 on Sunday at 11:59pm EST.

#### *Notes on Grading*

You will primarily be assessed on the plausibility of your analysis: have you appropriately used course material to forecast the consequences of your selected intervention? This leads to a couple pieces of advice: (1) avoid things that are so minor they won't have an effect, and (2) do not summarize an article that does what your assignment is meant to do (that is, don't summarize an article that talks about the macroeconomic consequences of a particular intervention). Do *not* choose an article that already discusses economic consequences and summarize it – that will not satisfy the assignment and not earn a passing grade. The idea is that you perform the economic analysis yourself!

## Final Exams

After Module 5, you will have a week when your sole task is to take the exam covering the Microeconomics section of the course. After Module 10, you will have a week to take the exam covering concepts included in the Macroeconomics section of the course. These exams are each worth 30% of your grade and are comprised of two parts. The first is a 25-question short-answer test (similar to the module quizzes). The second is a 5-question essay test. Take note of the availability of the macroeconomics exam, which is slightly different!

- Microeconomics: Week 6 Monday at 6am EST – Sunday at 11:59pm EST
- Macroeconomics: Week 12 Saturday at 6am EST – Thursday at 11:59pm EST

## Non-Assessed (but Recommended!) Activities

In addition to the assessed quizzes, essay, and exams, there is an abundance of practice material for you to work with. Every module includes two sets of practice material:

- Practice Quizzes  
Each module includes quiz containing questions similar to the graded quizzes. This quiz does not count toward your course graded, and it can be retaken as many times as you wish.
- Problem Sets  
Most importantly, every module includes its own problem set and answer key. This is arguably the most important component of the course aside from the lectures themselves. It is *strongly* recommended to work through the problem set each week – first without the answers, then with the answer key. If you are confused about the material, that's when you should get in touch with myself or Zoe.

If you have done all of this practice material and are still not comfortable with the material, I'd caution you to focus more in thoroughly understanding the questions you have rather than looking for additional practice. There are additional questions in the textbook; however, I do not provide any additional practice questions beyond the large amount already included in the course!

## **Honor Code Statement**

Enrollment at SAIS obligates each student to conduct all activities in accordance with the rules and spirit of the school's Honor Code located in The Red Book: SAIS Student and Academic Handbook. The Honor Code governs student conduct at SAIS. It covers all activities in which students present information as their own, including written papers, examinations, oral presentations and materials submitted to potential employers or other educational institutions. It requires that students be truthful and exercise integrity and honesty in their dealings with others, both inside SAIS and in the larger community.

While the Honor code goes well beyond plagiarism, it is important that each student understand what is and is not plagiarism. Plagiarism will definitely result in failure of the paper or exam and may result in failing the course depending on the judgment of the professor. *Note: All papers submitted for this course will be automatically processed by an anti-plagiarism system to ensure the integrity of work.*

## **Technical Requirements**

You must have reliable and easily accessible high-speed Internet service in order to complete course work successfully.

## **Contact**

I try to follow a policy of "radical availability": given how geographically spread out everybody is, there are no formal office hours on the course. However, you all have my personal mobile phone number (first page) and I strongly encourage you to reach out via email or text to ask quick questions or schedule calls for more substantial feedback. Bear in mind that I live in the Netherlands, which is 6 hours ahead of US Eastern Time. There is also a TA for this course, who will establish her availability via email in the first week of the course.

## Course Outline Part 1 - Microeconomics

### Module 1: Supply and Demand (Micro I)

Dates: Week 1

#### Learning Objectives

By the end of this module students will be able to:

- Graph a linear equation and derive an equation from a graph
- Explain what a demand curve represents (including why it can shift)
- Explain what a supply curve represents (including why it can shift)
- Calculate and graphically find an equilibrium outcome
- Use the concept of elasticity to compare demand/supply curves and equilibria
- Use cross-price elasticity to identify substitutes vs complements

#### Readings and Lectures

##### Lectures & Associated Mankiw Sections

- Linear Equations (*see supplemental resource below*)
- The Demand Curve (4.1 and 4.2)
- The Supply Curve (4.3)
- Finding an Equilibrium (4.4)
- Elasticity (*all of chapter 5*)
- Substitutes and Complements (5.1g)

##### Supplemental Resources

- Khan Academy – [Microeconomics](#)

#### Assignments

##### Graded Quiz

- 10-15 Multiple choice questions
- 1 short essay of 1-2 paragraphs
- 60-minute duration
- Due Sunday, 11:59pm EST

## Module 2: Evaluating Policy

Dates: Week 2

### Learning Objectives

By the end of this module students will be able to:

- Identify consumer surplus and explain its meaning / importance
- Identify producer surplus and explain its meaning / importance
- Calculate the welfare impact of price controls
- Calculate the welfare impact of taxes and subsidies
- Show the effect of opening to trade on a graph (and determine who gains and who loses)

### Readings and Lectures

#### Lectures & Associated Mankiw Sections

- Consumer Surplus (*all of chapter 7*)
- Producer Surplus (*all of chapter 7*)
- Price Controls (*6.1*)
- Taxes and Subsidies (*6.2 and all of chapter 8*)
- Trade and Tariffs (*all of chapter 9*)

### Assignments

#### Graded Quiz

- 10-15 Multiple choice questions
- 1 short essay of 1-2 paragraphs
- 60-minute duration
- Due Sunday, 11:59pm EST

## Module 3: Consumer Theory

Dates: Week 3

### Learning Objectives

By the end of this module students will be able to:

- Graphically and mathematically express both indifference curves and budget lines
- Find a consumer optimum on a graph and explain what it represents
- Explain the meaning of the equal marginal principle and why it holds at the consumer optimum.
- Explain how changing incomes and prices affect consumer optima, including income and substitution effects.
- Critically evaluate the notion of the rational homo economicus.

### Readings and Lectures

#### Lectures & Associated Mankiw Sections

- Indifference Curves and Budget Lines (*21.1 and 21.2*)
- Consumer Optima (*21.3*)
- Equal Marginal Principle (*none*)
- Income and Substitution Effects (*all of chapter 21*)
- Homo Economics (*see supplementary reading below*)

#### Supplemental Reading

- McFadden, Daniel. "[The New Science of Pleasure](#)"

### Assignments

#### Graded Quiz

- 10-15 Multiple choice questions
- 1 short essay of 1-2 paragraphs
- 60-minute duration
- Due Sunday, 11:59pm EST

## Module 4: Theory of the Firm

Dates: Week 4

### Learning Objectives

By the end of this module students will be able to:

- Contrast short-run and long-run production decisions for firms
- Explain the difference between various types of cost (economic, accounting, fixed, variable, sunk)
- Interpret a firm's cost structure – graphically, conceptually, and mathematically
- Identify the profit-maximizing level of production for a firm in perfect competition
- Identify the shutdown price level for a firm in perfect competition
- Determine whether firms will enter or exit a perfectly competitive market

### Readings and Lectures

#### Lectures & Associated Mankiw Sections

- Short Run vs. Long Run (*none*)
- Cost (*all of chapter 13*)
- Graphing Cost (*all of chapter 13*)
- Profit Maximization (*14.1 and 14.2*)
- Shutting Down (*14.2*)
- Firm Entry and Exit (*14.3*)

### Assignments

#### Graded Quiz

- 10-15 Multiple choice questions
- 1 short essay of 1-2 paragraphs
- 60-minute duration
- Due Sunday, 11:59pm EST

## Module 5: Markets and Market Power

Dates: Week 5

### Learning Objectives

By the end of this module students will be able to:

- Identify the defining characteristics of a monopoly
- Explain the concept of marginal revenue – and calculate it from a table.
- Find the equilibrium outcome for a monopolistic marketplace
- Compare the costs and benefits of monopolies
- Contrast monopoly power and the power to price discriminate
- Distinguish between monopoly and monopolistically competitive markets and outcomes

### Readings and Lectures

#### Lectures & Associated Mankiw Sections

- Monopolies (*none*)
- Marginal Revenue (*15.2*)
- Equilibrium for Monopolies (*15.2, 5.1e and 5.1f*)
- Monopolies (*15.1 – 15.3*)
- Price Discrimination (*15.4*)
- Monopolistic Competition (*all of chapter 16*)

### Assignments

#### Graded Quiz

- 10-15 Multiple choice questions
- 1 short essay of 1-2 paragraphs
- 60-minute duration
- Due Sunday, 11:59pm EST



## Final Microeconomics Exam

Dates: Week 6

### Assignments

#### Midterm Exam, Part 1 (50 pts)

- 25 multiple choice questions
- 90 mins
- Due Sunday, 11:59 EST

#### Midterm Exam, Part 2 (50 pts)

- 5 short essays
- 90 mins
- Due Sunday, 11:59 EST

## Course Outline Part 2 - Macroeconomics

### Module 6: Income and Employment

Dates: Week 7

#### Learning Objectives

By the end of this module students will be able to:

- Contrast microeconomics and macroeconomics
- Explain what GDP is, what it includes, and what it does not.
- Contrast and calculate real and nominal GDP
- Assess the validity of GDP as a measure of national well-being
- Define and use the major metrics used to measure unemployment
- Assess the consequences of several (public and private) labor market policies

#### Readings and Lectures

##### Lectures & Associated Mankiw Sections

- Microeconomics vs. Macroeconomics (*none*)
- Defining GDP (23.1 – 23.3)
- Real vs. Nominal GDP (23.4)
- The Validity of GDP (23.5)
- Unemployment (28.1 and 28.2)
- Employment Intervention (28.3)

#### Assignments

##### Graded Quiz

- 10-15 Multiple choice questions
- 1 short essay of 1-2 paragraphs
- 60-minute duration
- Due Sunday, 11:59pm EST

## Module 7: Money and Finance

Dates: Week 8

### Learning Objectives

By the end of this module students will be able to:

- Define “prices” and their relationship to inflation
- Explain the consequences of inflation (and deflation)
- Identify the key players in a modern monetary system (both public and private) and their aims
- More carefully define “savings”, “investment”, and the interest rate
- Use the loanable funds framework (LFF) to forecast the effect of macroeconomic shocks in a closed economy

### Readings and Lectures

#### Lectures & Associated Mankiw Sections

- Prices and Inflation (30.1)
- Problems with Inflation (30.2)
- The Monetary System (26.1)
- Savings vs. Investment (26.2 and 26.3)
- The Loanable Funds Framework (26.2 and 26.3)

### Assignments

#### Graded Quiz

- 10-15 Multiple choice questions
- 1 short essay of 1-2 paragraphs
- 60-minute duration
- Due Sunday, 11:59pm EST

## Module 8: Open Economy Macroeconomics

Dates: Week 9

### Learning Objectives

By the end of this module students will be able to:

- Address the difficulties of referring to “the interest rate” – and contrast several important examples
- Distinguish between different exchange rates and characterize their relationships with inflation
- Explain how the LFF is linked to net capital outflows (NCO).
- Explain how and why capital moves across borders.
- Use the LFF to forecast the effect of macroeconomic shocks in an open economy environment, including the effect on exchange rates.

### Readings and Lectures

#### Lectures & Associated Mankiw Sections

- Interest Rates (*none*)
- Exchange Rates (*32.1 and 32.2*)
- The Open Economy LFF (*31.2*)
- Capital Flows (*none*)
- Using the Open Economy LFF (*31.3*)

### Assignments

#### Graded Quiz

- 10-15 Multiple choice questions
- 1 short essay of 1-2 paragraphs
- 60-minute duration
- Due Sunday, 11:59pm EST

## Module 9: Growth

Dates: Week 10

### Learning Objectives

By the end of this module students will be able to:

- Explain what the aggregate demand curve represents (including why it can shift)
- Explain what the aggregate supply curve represents (including why it can shift)
- Analyze the effects of policy decisions (or exogenous shocks) on the AS-AD model
- Contrast strategies for maximizing growth
- Critically assess whether continued growth is necessary (or likely) – and identify the distributional consequences of slower growth

### Readings and Lectures

#### Lectures & Associated Mankiw Sections

- Aggregate Demand (33.2 and 33.3)
- Aggregate Supply (33.4)
- The AS-AD Model (33.5)
- Growth (*all of chapter 25*)
- Do We Need Growth? (*see supplementary readings below*)

#### Supplemental Reading

- Krugman, Paul. "[Slow Steaming and the Supposed Limits to Growth](#)"
- Semuels, Alana. "[Does the Economy Really Need to Keep Growing Quite So Much?](#)"

### Assignments

#### Graded Quiz

- 10-15 Multiple choice questions
- 1 short essay of 1-2 paragraphs
- 60-minute duration
- Due Sunday, 11:59pm EST

## Module 10: To Intervene or Not to Intervene?

Dates: Week 11

### Learning Objectives

By the end of this module students will be able to:

- Identify and explain the usage of monetary stabilization tools
- Identify and explain the usage of fiscal stabilization tools
- Evaluate the arguments for and against the usage of stabilization policy
- Explain the tradeoff between inflation and unemployment
- Explain the importance of a lender of last resort

### Readings and Lectures

#### Lectures & Associated Mankiw Sections

- Monetary Policy (34.1)
- Fiscal Policy (34.2)
- Stabilization Policy (34.3)
- The Inflation-Unemployment Tradeoff (*all of chapter 35*)
- Lenders of Last Resort (*none*)

### Assignments

#### Graded Quiz

- 10-15 Multiple choice questions
- 1 short essay of 1-2 paragraphs
- 60-minute duration
- Due Sunday, 11:59pm EST

#### Short Paper

- See assignment details on p.2-3
- Due Sunday, 11:59pm EST

## Final Macroeconomics Exam

Dates: Week 12

### Assignments

#### Final Exam, Part 1 (50 pts)

- 25 multiple choice questions
- 90 mins
- Due Thursday, 11:59 EST

#### Final Exam, Part 2 (50 pts)

- 5 short essays
- 90 mins
- Due Thursday, 11:59 EST