

ECON 104: Introductory Macroeconomic Analysis & Policy

Zhiyuan (Ryan) Chen

06/26/2019 - 08/07/2019

Class Hours: Mo/Tu/We/Th/Fr 11:10am - 12:25pm

Office Hours: Tue & Thu 4:10-5:10 pm

E-mail: zxc5109@psu.edu

Class Room: 1st class in 10 Sparks, then 104 Keller

Office: 413 Kern

Grader: Mehrdad Mohammadi

Course Description

Students will be introduced to the methods and tools of economic analysis, and these analytical tools will be applied to questions of current policy interest. Broadly, the course focuses on the determination of national income, on unemployment, inflation, and economic growth in the context of a global economy, and on how monetary and fiscal policy, in particular, influence the economy. After this course, you will be able answer questions like: (i) How do the expansion/contraction of the economy affect workers and firms? (ii) What instruments can the government use to smooth the economic cycles? (iii) What's the benefits of opening up to trade?

Course Materials

- **Textbook:** R. Glenn Hubbard & Anthony Patrick O'Brien, *Macroeconomics*, 7th edition.
- **Course website:** syllabus, assignments, quizzes, lecture notes as well as grades will be posted on <https://psu.instructure.com>. Students are responsible for checking this website on a regular basis.
- **After-class reading (optional):** websites like <https://www.wsj.com/news/economy> and <https://www.bloomberg.com/> are good sources of Macroeconomic news and economic intuition. Economy-related articles from <https://www.nytimes.com/> are a good supplementary reading as well. I encourage you to read the articles from these websites mindfully always trying to relate their logical conclusions to economic mechanisms and results we study in the classroom.

Prerequisites

We will use algebra and geometry extensively to explain the macroeconomic models. Students should be comfortable graphing linear algebraic expressions, clearly explaining in words linear

functions of two variables, and calculating the areas of triangles and rectangles before enrolling in the class. A review of all related concepts is in the appendix to Chapter 1.

Course Structure

Lectures

1. Foundations and Models (Chapter 1):
Key assumptions; marginal analysis; objectives of macroeconomics
2. Comparative Advantage, Market System, Prices (Chapter 2,3)
Comparative advantage; operation of markets; demand and supply
3. Measuring the Economy: GDP, Prices and Inflation (Chapter 8, 9)
Expenditure approach, valued added approach, real vs. nominal GDP
4. Unemployment and Inflation (Chapter 9)
5. Long-Run Economic Growth and Business cycles (Chapter 10, 11)
economic growth, saving/investment, financial system, business cycles
6. Explaining Short-Run Fluctuations (Chapter 12, 13)
aggregate demand, aggregate supply, short-run analysis
7. Monetary and Fiscal Policy (Chapter 14-16)

A tentative course schedule is at the end of the syllabus.

Homework assignments

There will be three homework assignments, each of which helps the students review the important concepts covered in the lecture. You are encouraged to work in groups. However, you are expected to write up your answers in your own words individually. It is a violation of Academic Integrity to use a classmate's answers in your assignment.

Late assignments will be accepted for no penalty if a valid excuse is communicated to the instructor before the deadline. After the deadline, assignments will be accepted for a 50% deduction to the score up to 2 days after the deadline. After this any assignments handed in will be given 0.

Exams

There will be 2 in-class midterm exams and a final exam. Exams 1 and 2 will consist of multiple choice, true/false, fill in the blank and short analytical problems/essays similar to practice problems and exercises we will do in class. The final exam is cumulative. **Key exam dates:**

- In-Class Exam 1: week of July 8
- In-Class Exam 2: week of July 29

- Final Exam: location and time decided by the University

Do not miss exams! Mark your calendars and arrange to be available for exams. The date for the final exam is set by the University and I cannot change it. Also, university policies do not allow me to have make-up exams prior to this date.

Excused Absences: In the case of a University approved excused absence, it is your responsibility to provide: (1) timely notification to me before the exam and (2) official documentation certifying you are unable to take an exam. If you do not have a valid excuse, you will not be allowed to take the makeup exam. No exceptions will be made.

Grading Policy

We will have 5 homework assignments. The lowest grade out of these 5 will be dropped. There are 2 midterm exams each covering a distinct part of the course. The final exam will be cumulative and covering the whole course. Grades might be curved at the end of the course if the class mean is low. The tentative weights and grading scale is as follows.

Components	Percent	Points	Grade distribution
Class participation	10%	100	A >=93.00% A- >=90.00%
HW assignments	20%	100	B+ >=86.67% B >=83.00%
Exam 1	20%	100	B- >=80.00%
Exam 2	20%	100	C+ >=76.67% C >=70.00%
Final exam	30%	100	D >=60.00%
Total	weighted average		F <60.00%

Notes: Grades on the above will be recorded in Canvas as we proceed through the course. Your final course grades will be calculated at the end of Summer Session 2 and posted in Lion Path. Please **ignore** course grades calculated by Canvas. Canvas grades do not reflect the above weights, dropping your lowest assignment grade, etc.

University Policies

Valid Reasons for Missing An Exam

Found at <http://econ.la.psu.edu/undergraduate/valid-excuses>. Illness or injury, family emergencies, certain University-approved curricular and extra-curricular activities, and religious holidays can be legitimate reasons to be excused from a scheduled examination.

In the case of your own illness or injury, confirmation from a physician, physician's assistant, a nurse-practitioner, or a nurse is required. Further, barring extraordinary circumstances, the confirmation must be available to the instructor prior to the missed exam.

With regard to family emergencies, you must provide verifiable documentation of the emergency. Unless the emergency is critical you should notify the instructor in advance of your absence from the scheduled course event. In cases of critical emergencies, you must notify the instructor within one week of your absence. For University-approved curricular and extra-curricular activities, verifiable documentation is also required. The letter must be presented to the instructor at least one week prior to the first absence. In the case of religious holidays, notify the instructor by the third week of the course of any potential conflicts.

Statement of Academic Integrity

Penn State defines academic integrity as the pursuit of scholarly activity in an open, honest and responsible manner. All students should act with personal integrity, respect other students' dignity, rights and property, and help maintain an environment in which all can succeed through their efforts (Faculty Senate Policy 49-20).

Dishonesty of any kind will not be tolerated in this course. Dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Students who are found to be dishonest will receive academic sanctions and will be reported to the University's Judicial Affairs office for possible further disciplinary sanction.

Statement of Nondiscrimination

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. The Pennsylvania State University does not discriminate against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status.

Educational Equity and Bias Reporting Statement

Penn State takes great pride to foster a diverse and inclusive environment for students, faculty, and staff. Acts of intolerance, discrimination, or harassment due to age, ancestry, color, disability, gender, gender identity, national origin, race, religious belief, sexual orientation, or veteran status are not tolerated. Consistent with University Policy AD29, students who believe they have experienced or observed a hate crime, an act of intolerance, discrimination, or harassment that occurs at Penn State are urged to report these incidents as outlined on the University's Report Bias webpage (<http://equity.psu.edu/reportbias/>)

Disability Access Statement

Penn State encourages qualified people with disabilities to participate in its programs and activities and is committed to the policy that all people shall have equal access to programs, facilities, and admissions without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. If you anticipate needing any type of accommodation in this course or have questions about physical access, please tell the instructor as soon as possible.

Schedule and weekly learning goals

The schedule is tentative and subject to change. The learning goals below should be viewed as the key concepts you should grasp after each week, and also as a study guide before each exam, and at the end of the semester. Each exam will test on the material that was taught up until 1 week prior to the exam (i.e. vorticity will not be tested until exam 2). The applications in the second half of the semester tend to build on the concepts in the first half of the semester though, so it is still important to at least review those concepts throughout the semester.

Week 01, 06/24 - 06/28: Foundations and Models

- Key assumptions in economic models
- Marginal analysis
- Objectives of macroeconomic analysis

Week 02, 07/01 - 07/05: Comparative advantage, Market System, Prices

- Production possibilities frontier
- Comparative advantage
- The market system
- Determinants of prices

Week 03, 07/08 - 07/12: Measuring the economy

- Expenditure approach
- value added approach
- real vs. nominal GDP
- In-Class Exam 1

Week 04, 07/15 - 07/19: Unemployment and Inflation

- measurements of unemployment rate and labor force participation rate
- types of unemployment
- explaining unemployment
- measuring inflation
- nominal vs. real interest rates

Week 05, 07/22 - 07/26: Economic growth

- long-run economic growth
- saving/investment
- financial system
- business cycles

Week 06, 07/29 - 08/02: Short-run fluctuations

- aggregate demand
- aggregate supply
- short-run analysis
- Exam 2

Week 07, 08/05 - 08/09: Monetary and fiscal policy

- Functions and the creation of money
- Monetary policy in AS-AD analysis
- Discretionary vs. automatic stabilizers
- Government debt and deficit