

45-711 – Global Economics

Laurence Ales

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Class Time

- **Section A:** Tuesday & Thursday from 8:00 to 9:45 in TEP 2110.
- **Section B:** Tuesday & Thursday from 10:00 to 11:45 in TEP 2110.
- **Section C:** Tuesday & Thursday from 2:00 to 3:45 in TEP 2110.

Course Description

This class is designed to give you an understanding of the functioning of the US economy and how it relates to the global economy. This knowledge will enable you to grasp the enormous differences in economic environments faced by businesses around the world; you will be able to appreciate how the environment in the United States differs from that of emerging and developing countries.

We will organize our analysis by viewing the US economy through the lenses of open-economy macroeconomics. This is the field of economics concerned with how national performance and economic policies are affected by the presence of trade and international capital flows. We will use this approach to study issues such as economic indicators and implication of global shocks (where are we headed?); economic growth (why are some countries more productive than others?); the interconnection between international trade, capital flows and foreign exchange rates; fiscal and monetary policy (how does government policy affect the economy and how can the FED impact inflation?)

Macroeconomics is an exciting discipline. I hope you will come to share my enthusiasm for it. A clear understanding of macroeconomic issues will provide you with a crucial advantage when making strategic business decisions.

Learning objectives

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

1. ...understand and be able to use the various measures of an aggregate economy's performance and well-being;
2. ...understand a basic macroeconomic framework to analyze changes in the global economy;
3. ...understand the factors that cause economic growth and be able to describe the patterns of economic development over time and across countries;
4. ...be able to describe the state of the labor market and understand frictions that might limit the smooth functionings of labor markets;
5. ...understand how the US interacts with the global economy by studying the fundamentals of trade, international capital flows, and exchange rate determination;
6. ...understand the tradeoffs present in designing fiscal policy and the impact it can have on the economy;
7. ...understand similarities and differences of different types of money and the policy instruments available to the Federal Reserve.

Course materials

Textbook: There is no textbook required. The slides, videos and provided handouts are designed to be self-contained. If you are interested in a reference book, check:

Charles I. Jones - Macroeconomics, Any Edition
W.W. Norton & Company

Twitter and other News: The class official Twitter feed is [@cmu_macro](#). In this feed, I will post interesting and relevant macroeconomic news.

Canvas: I will make any additional material available on Canvas. Check it regularly.

Slides: I will make slides available on the class Canvas website. The slide deck is designed as a linear narrative for the module. The asynchronous videos will cover certain blocks of slides. Remaining slides will be relevant for the Wednesday discussion section. Additional material

of interest—not covered in class nor required for the exams—will be relegated to the Appendix section. Also, during the Mini, I will prepare the slides in a book format. The idea is for you to have a document that you might keep for years to come.

Data Analysis: Assignments will rely heavily on data analysis from original sources. You can execute the assignments in any language or using any software you wish. I will provide guides for two main software packages. All of the assignments can be completed using Excel, you will find data and instructions to do so in the assignments. In the assignments, you will also find instructions on how to complete the work using R. This will be in the form of partially completed scripts. Use this path if you are comfortable using R and wish to build on your previous experience.

The Active Classroom

Class Discussion: In-class discussion will be an essential element of each of our meetings. Discussions will occur mostly at the beginning of class; the goal will be to introduce the key topics and trade-offs that will be covered that day. To spark this conversation, a few days before the class, I will distribute some reading materials. These materials will be organized in a case-study fashion. It will be crucial for you to read and think about the material ahead of time. Doing so will ensure that the class discussion will be rich and meaningful to everyone. The grade on class participation will also be based on the comments you will contribute to the discussion.

Live Polls: During classes, we will conduct instant polls. These non-graded quizzes will be anonymous and will be used to test your knowledge and spark class discussions. We will use an online form. The online form can be accessed here (make sure to bookmark it!):

<http://tinyurl.com/45711-ales>

Feedback, Email and Office Hours

Together with the usual evaluation forms, I set up an online, live, instant and anonymous feedback system. You can access it here:

<https://tinyurl.com/ales-comments>

I will try to respond to emails within 12 hours. Given high volumes, expect delays just before homework is due. Check the first page for office hours offered by myself and the TA. If you are unable to meet at the scheduled time, I will be happy to schedule additional office hours by appointment. I will also set up either a Slack channel or a Discord server (depending on preferences). You can use these tools to communicate with me and the rest of class anytime. Check the links on the Canvas homepage for how to access these tools.

Attendance

Attendance will be taken at the beginning of every class on the sign-up sheet. If you forget to sign up just let me know. You will be excused for any class missed for reasons connected to your health or job-search. Just let me know.

Grading & Additional Policies

The final grade will be computed according to the following components:

- Five assignments (25% of total grade)
- One midterm (25% of total grade)
- One comprehensive final exam (30% of total grade)
- 21% for attendance and class participation

Class participation will also be determined by evaluating your engagement in the class discussions.

Working in groups: You will be assigned a homework group. When submitting, only one copy of the homework for each group is required. Working in groups is not allowed for the midterm. Students who copy assignments, allow assignments to be copied, or cheat on tests will fail the assignment or test on the first offense, and fail the entire course on the second.

Diversity in this Course: It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

Accommodations for Students with Disabilities: If you have a disability and have an accommodations letter from the Disability Resources office, I encourage you to discuss your accommodations and needs with me as early in the Mini as possible. I will work with you to ensure that accommodations are provided as appropriate. If you suspect that you may have a disability and would benefit from accommodations but are not yet registered with the Office of Disability Resources, I encourage you to contact them at: access@andrew.cmu.edu.

Finally:

This semester marks the two-year anniversary of the beginning of the pandemic. While the situation is improving it is a stressful time. We are all under a lot of stress and uncertainty at this time. Make sure to move regularly, eat well, and reach out to your support system or me at ales@cmu.edu if you need to. We can all benefit from support in times of stress, and this semester is no exception.

There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful. If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services (CaPS) is here to help: call 412-268-2922 and visit their website at

<http://www.cmu.edu/counseling/>

Consider reaching out to a friend, a family member, me or other faculty you trust for help getting connected to the support that can help.

Topics Outline

This section provides some additional details on the topics covered in each module.

1. Measurement

- Methodology. Measuring domestic product and income. Nominal and real GDP. Comparisons of GDP across countries. The limits of GDP.

2. Cycles & Trends

- Properties of business cycles, booms, and recessions. Business cycle indicators, leading and lagging variables. Smoothing, filtering and basic business cycle forecasting.

3. Growth

- Growth facts: historical and contemporary. The aggregate production function. Measures of productivity. Sources of growth, and the Solow growth model. Accounting for growth: the role of capital and labor in economic growth.

4. Labor Markets

- The US labor market. Employment, unemployment and other important labor market statistics. The frictionless labor model. The minimum wage. Institutions and policies that promote/hinder employment. The stock and flow model and labor market efficiency. Technology & the future of US labor markets.

5. International Economics

- Trade and comparative advantage. Tariffs: facts and implications for welfare. Trade agreements: NAFTA. Current account, international lending and borrowing. Exchange rates: definition and regimes. Determinants of exchange rates: purchasing power parity and interest rate parity conditions. International capital markets. Macroeconomic factors that help determine exchange rates in the short and long run.

6. Fiscal Policy

- Government: revenues and spending. Fiscal multipliers. Current fiscal stimulus and its effects. Government debt and deficits. Debt sustainability. Taxation: facts and determinants.

7. Monetary Policy

- Money: definitions and measurement. Cryptocurrencies. The Federal Reserve: tools and objectives. Determining short-run interest rates and inflation targeting.

Important Dates + Calendar

- **Midterm Exam:** (take home/submit online) flexible schedule: Apr 7th-11th.
- **Final Exam:** Tuesday May 2th from 9:00AM to 12 Noon.

Week	Tuesday	Thursday
1	(Mar 14)	(Mar 16) • Introduction + Measurement → Assignment 1 Posted
2	(Mar 21) • Growth: Part I	(Mar 23) • Growth: Part II Assignment 1 Due → → Assignment 2 Posted
3	(Mar 28) • Labor Markets: Part I	(Mar 30) • Labor Markets: Part II Assignment 2 Due → → Assignment 3 Posted
4	(Apr 4) • International Economics: Part I	(Apr 6) • International Economics: Part II Assignment 3 Due →
5	(Apr 11) • International Economics: Part III	(Apr 13) • Cycles & Trends → Assignment 4 Posted
6	(Apr 18) • Fiscal Policy: Part I	(Apr 20) • Fiscal Policy: Part II Assignment 4 Due → → Assignment 5 Posted
7	(Apr 25) • Monetary Policy: Part I	(Apr 27) • Monetary Policy: Part II • Conclusion Assignment 5 Due →