SYLLABUS

Course: Principles of Macroeconomics

Course Description

This course introduces the economic analysis of the aggregate economy. We begin with the microeconomic foundations of supply and demand to understand how markets function and clear the concept of general equilibrium in Macroeconomics. We then transition to the Economic Measurement learning how to measure national output (GDP), the cost of living (Inflation), and the health of the labor market (Unemployment). The final third of the course focuses on the tools of policy—Fiscal and Monetary—and how they influence long-run growth and short-run stability.

Required Text

- *Principles of Macroeconomics* by N. Gregory Mankiw (Current Edition).
- *Macroeconomics* by Olivier Blanchard

Weekly Schedule

Module I: Micro Foundations & Markets

- **Week 1: The Ten Principles & Thinking Like an Economist**
    - Opportunity cost, marginal thinking, and the role of incentives.
- **Week 2: Supply and Demand**
    - The Law of Demand and the Law of Supply.
    - Market Clearing: Equilibrium, Surpluses, and Shortages.
- **Week 3: Elasticity and its Application**
    - Tariffs, quotas and taxes:
- **Week 4: Markets and Welfare**
    - Economic Surplus

Module II: Economic Measurement

- **Week 5: Measuring a Nation's Income (GDP)**
    - The three ways to measure GDP: Expenditure, Income, and Value-Added.
- **Week 6: GDP Continued: Real vs. Nominal**
    - The GDP Deflator and common fallacies (The Broken Window).
- **Week 7: Measuring the Cost of Living**
    - The Consumer Price Index (CPI) and correcting economic variables for inflation.

- **Week 8: Unemployment: Keynes and the Great Depression**
    - Defining the Labor Force, frictional vs. structural unemployment, and the natural rate.

Phase III: The Real Economy in the Long Run

- **Week 9: Production and Growth**
    - Productivity, factors of production, The Solow model (introductory).
- **Week 10: Saving, Investment, and the Financial System**
    - The Loanable Funds market: How S=I.
- **Week 11: The Monetary System**
    - What is money anyway? The Federal Reserve and the banking system.

Phase IV: Short-Run Economic Fluctuations

- **Week 12: Aggregate Demand and Aggregate Supply (AD-AS)**
    - Model-framework that helps us think about Business Cycles
- **Week 13: The Influence of Monetary and Fiscal Policy**
    - The Theory of Liquidity Preference and the Multiplier Effect.
- **Week 14: The Short-Run Trade-off between Inflation and Unemployment**
    - The Phillips Curve and Macroeconomic Stabilization
- **Week 15: Monetary and Fiscal Policy**
    - Rules vs. Discretion, Inflation Targeting, Deficits and Surpluses

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Grading

Component	Weight	Description
Problem Sets	20%	Bi-weekly assignments (involving some basic programming/data analysis component)
Midterm 1	25%	Covers Module I (Micro foundations).
Midterm 2	25%	Covers Module II & III (Macro Data & Long Run).
Final Exam	30%	Cumulative, with a focus on Module IV (Policy & AD-AS).

Learning Objectives

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

1. Understand macroeconomic aggregates and the concept of general equilibrium
2. Calculate Real GDP and Inflation using raw price and quantity data.

3. Analyze the impact of a Fed monetary policy using the AD-AS model.
4. Understand the links between productivity, technology and economic growth.
5. Reason about macroeconomic developments using mathematical models.

Course Policy

- There are a *total* of 4 late days across all homeworks, with no more than 2 late days per homework.
- HWs submitted after all late days are exhausted will be awarded 50% points if submitted within 24 hrs after the late days are exhausted and 0% after that.

Academic Integrity and the use of Artificial Intelligence tools

All students enrolled in this course are subject to the University's Academic Integrity standards. Any form of plagiarism will invite serious penalties. The students must submit their own work for all assignments. While students are encouraged to seek help from others, the teaching assistants and myself, putting assignment problems through AI (such as ChatGPT, Gemini) is not allowed. The purpose of course assignments and projects is to develop your thought process and problem-solving capabilities. Getting somebody else to solve the assignments defeats that purpose. You may use resources available on the internet or AI tools to develop your understanding of a topic. If you do take help from a source, make sure to cite it.