## EC134B: Principles of Macroeconomics Fall 2022 Colby College

Instructor: Kathrin Ellieroth Email: kathrin.ellieroth@colby.edu Class Hours: TR 2:30pm-3:45pm

Office Hours: TR 10am – 11am, W TBD

TA: Haley Wims

Materials: Tophat

Prerequisites: EC 133, Principles of Microeconomics

## **Course Description:**

This course will introduce you to the basic macroeconomic variables and models of the aggregate economy which will allow you to analyze macroeconomic questions and events. We are going to use these models to think about economic growth, business cycles, monetary policy, fiscal policy, and the international economy. We will analyze data on the macroeconomy from FRED and use this data to foster our understanding of the main models.

## **Course Objective & Learning Outcomes:**

- 1. Define, calculate, interpret, and relate the three basic macroeconomic variables: GDP, unemployment, and inflation.
- 2. Define, set-up, and manipulate the aggregate demand/aggregate supply model. Using the models illustrate and explain how changes in the economy affect the three macroeconomic variables in both the short and long run.
- 3. Define and explain how basic fiscal policy functions. Examine how changes to fiscal policy affect the three macroeconomic variables.
- 4. Define and explain how money, banks, and monetary policy function and how they relate to each other. Examine how changes to monetary policy affect the three macroeconomic variables.
- 5. Define and explain how labor, capital, and technology affect Economic Growth.

## **Course Organization:**

Class meetings will be held <u>in-person</u> and will be a mix of lectures, individual and group activities, and discussions. I expect that you come to class prepared and actively engage whenever possible: Learning highly benefits from questions, critiques, and engagement with each other. I will not record or live-stream lectures as the classroom technology and class format do not support live-streaming or recording. However, I upload all class slides and activities as well as pre-recorded videos to Moodle. Class slides, activities, and pre-recorded videos are no substitute for attending class but are meant to supplement class time and help you if you have to miss class.

### Office Hours:

The best time to talk to me will be during the scheduled office hours. If you have time conflicts please email me and we will find and arrange a time for us to meet. While I try to respond to emails in a timely manner, things come up, so allow for up to 24 hours (excluding weekends) for me to respond. Generally, I will not respond to emails after 7pm, before 7am, or on the weekends.

## **Grading and Assessments:**

	Possible Points	% of Total
Homeworks	75 (average)	15
Participation	25	5
Podcast	75	15
Exam 1	100	20
Exam 2	100	20
Final Exam	125	25
Total	500	100

#### Homeworks

Homeworks are <u>hand-written</u> or typed <u>assignments</u> and will be designed for you to interact with the material, practice your understanding, and work with data. Each homework is worth 75 points and the average of your 10 best homeworks (12 homeworks in total) is worth 15% of your final course grade. I highly encourage you to form study groups and work on your problem sets together. However, you are required to submit your own work. <u>Please put the names of the classmates you worked with at the top of your paper.</u> Also, be aware that if you do not work through and understand the problem sets on your own, you will not be prepared for the exams. Homeworks will be assigned nearly every week and will be **due** <u>Thursdays at the beginning of class</u> unless otherwise noted. <u>Late homeworks will not be accepted and receive a score of zero.</u> In order to account for unforeseen circumstances, the two assignments with the lowest grade will be dropped.

### **Participation**

Credit will be earned through your participation in course readings, lectures, discussion, and in-class exercises. Additionally, note taking assignments will be part of your participation grade:

## • *Note taking*

For one class, you will be responsible for scanning and uploading a copy of your notes to Moodle (each week you will find a folder called "Notes" where you can upload your notes) for access by all students. You should upload your notes as a PDF file by **Friday of the week you were assigned to**. The note taking assignment will count for 20% of your participation grade (5 points which is 1% of your total grade). I am not looking to take away points, but I need to see good faith effort on your part.

#### **Podcast**

Groups of 3-4 students will each produce a podcast covering a topic related to Macroeconomics of your choice. The podcast is worth 15% of your final course grade. More information about the Podcast assignment will be made available during the beginning of the course. The podcast is due **Tuesday, November 22<sup>nd</sup> at 11:59pm.** 

#### Exams

Exams 1 and 2 are worth 20% and will be given during class time on **Tuesday, October 18th** and **Tuesday, November 15th.** The final exam is worth 25% and will be given during the final examination period. All exams will be either multiple choice, or graphical/numerical problems, or short essay questions, or any combination of these three. The exams will be cumulative since the methods of analysis for economics are cumulative.

A+	485 – 500 (97-100%)
A Excellent	460 – 484 (92-96%)
A-	440 – 459 (88-91%)
B+	425 – 439 (85-87%)
B Very Good to Good	405 – 424 (81-84%)
B-	385 – 404 (77-80%)
C+	370 – 384 (74-76%)
C Satisfactory	350 – 369 (70–73%)
C-	335 – 349 (67-69%)
D+	320 – 334 (64-66%)
D Minimally acceptable	300 – 319 (60-63%)
D-	275 – 299 (55-59%)
F Not acceptable	0 – 274 (0-54%)

## **Important Dates**

9/29	Find your podcast group	
10/6	Submit your podcast idea	
10/18	Exam 1	
10/10 – 10/11	Fall recess (No class)	
11/15	Exam 2	
11/23 – 11/27	Thanksgiving recess (No class)	
11/22	Podcast	
TBD (Final Examination Period)	Final Exam	

### **Course Policies**

#### Attendance

I do not take attendance. However, I expect you to follow Colby's academic procedures and expect students "to attend all of their classes and scheduled course events in any semester" and understand that "failure to attend can lead to a warning, grading penalties, and/or dismissal from the course by the instructor with a failing grade". Furthermore, you are responsible for all material and content presented in lectures for any assessment. When working on activities during class time, I expect all of you to participate and I might call on individuals to present their findings/results.

If you have to miss class, it is your responsibility to reach out to your instructor, your TAs, your classmates and check Moodle to make sure that you that you can make up missed content and receive important information.

Extra Credit: There will be no extra credit given to any individual students.

## **Grading Dispute**

All questions/disputes/problems/challenges regarding the grading of an assignment must be addressed within 7 days of the return of the assignment <u>in written form</u>. If you choose to petition for a change to your grade, I will regrade the <u>entire</u> assignment.

## Make-up Policies

- *Homeworks*: No make-ups are provided for homeworks. For extended approved and extenuating circumstances the missed points from the homeworks will be considered when calculating your final grade.
- *Podcast:* No make-up is provided for the podcast. For extended approved and extenuating circumstances the missed points from the podcast will be considered when calculating your final grade.
- Exams: If you are not able to take an exam due to a valid reason which is outside of your control (In general, travel plans, oversleeping, other class workload, etc. are not valid reasons) and is an emergency or extenuating circumstance, you will take a make-up exam before the next scheduled class. Excuses should be obtained in advance of scheduled exams whenever possible.
- *Note-taking*: No make-up is provided for note-taking. For extended approved and extenuating circumstances the missed points from the note-taking assignment will be considered when calculating your final grade.

## Disruptive behavior

In order to foster understanding and an optimal learning environment, all participants share the responsibility of creating a disruptive-free environment. Behaviors that are disruptive to teaching or learning will not be tolerated. These include, but are not limited to, talking in class, reading/working on material unrelated to this class, using an electronic device unless specifically encouraged by the instructor, coming to class late or leaving early.

#### Diversity

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.

## Academic Honesty

Honesty, integrity, and personal responsibility are cornerstones of a Colby education and provide the foundation for scholarly inquiry, intellectual discourse, and an open and welcoming campus community. These values are articulated in the Colby Affirmation and are central to this course. You are expected to demonstrate academic honesty in all aspects of this course. If you are clear about course expectations, give credit to those whose work you rely on, and submit your best work, you are highly unlikely to commit an act of academic dishonesty.

Academic dishonesty includes, but is not limited to: violating clearly stated rules for taking an exam or completing an assignment; plagiarism (including material from sources without a citation and quotation marks around any borrowed words); claiming another's work or a modification of another's work as one's own; buying or attempting to buy papers or projects for a course; fabricating information or citations; knowingly assisting others in acts of academic dishonesty; misrepresentations to faculty within the context of a course, on an academic assignment, or an academic record; and submitting the same work, including an essay that you wrote, in more than one course without the permission of the instructors for those courses.

Academic dishonesty is a serious offense against the college. Sanctions for academic dishonesty are assigned by an academic review board and may include failure on the assignment, failure in the course, or suspension or expulsion from the College for multiple academic dishonesty findings.

## Academic Accommodations

I am available to discuss academic accommodations that any student with a documented disability may require. Please note that you'll need to provide a letter from the Dean of Studies Office documenting your approved accommodations. Please meet with me within two weeks of the start of the semester so that we can work together with the College to make the appropriate arrangements for you.

## Religious Holidays

Colby College supports the religious practices of students, faculty, and staff. Students are expected to notify their instructors of their intent to fulfill the obligations of their religious tradition well in advance of these days. For this class I ask that you notify me by e-mail at least 14 days in advance of the date in question.

#### **Covid Disclaimer:**

Classes will be held in-person and will follow Colby College's and the Economics department's (if applicable) Covid-19 policy and procedures regarding the safe instruction and interaction in the classroom. Furthermore, I reserve the right to make changes to mask policies, social distancing, and other classroom rules which might go beyond the college's or department's guidelines if I deem them necessary.

I reserve the right to make any necessary changes to the course schedule and requirements in order to improve the quality of the educational experience that the course will provide to students. The public health situation surrounding the SARS-COV-2 coronavirus and its associated illness, COVID-19, may necessitate mid-semester changes to the course. If so, I will communicate changes in assignments, grading schemes, and other course components clearly and in multiple formats.

## Tips for success in the class

The single most important advice I can give you is to *practice*, *practice*, *practice*. Learning Economics is like learning/practicing a sport, you will never be a good soccer player by watching others play. You can only excel if you train, put in the work and push yourself.

- Read the content and watch the videos. Be ready to ask your instructor, TA, classmates questions. Remember you are likely not the only one struggling with a concept and everyone will benefit from you asking a question.
- Work through and understand in-class problems, homework problems, and exams.
- Don't fall behind. Material moves quickly and builds on each other, so if you feel confused, come and talk to me or your TA and we can make sure you can keep up with the material

# **Course Schedule and Topics Overview**

You will find an overview of the course topics and important dates below. Please also make sure you receive announcements and messages sent on Moodle and check Moodle frequently.

## Disclaimer

Modifications of policies and the course schedule may be required during the semester. The instructor will make explicit announcements pertaining to any such changes.

## Tentative Schedule

Week	Topic	Chapter	Important Dates
Week 1	Organization, Introduction		
Week 2	GDP	8	HW 1 (Introduction): 9/15
Week 3	Labor Market	9	HW 2 (GDP): 9/22
Week 4	Inflation	9	HW 3 (Labor Market): 9/24
Week 5	Agg. Demand, Agg. Supply	13	HW 4 (Inflation): 10/6
Week 6	Static and Dynamic AD-AS Model	13	HW 5 (AD-AS): 10/13
Week 7	Application: Effects of Covid-19 on the US Labor Market		Exam 1: Tuesday, 10/18 HW 6 (Application): 10/20
Week 8	Static and Dynamic AD-AS Model	13	HW 7 (Podcast): 10/27
Week 9	Fiscal Policy	16	HW 8 (AD-AS Model): 11/3
Week 10	Money, Banks, and the Fed	14	HW 9 (Fiscal Policy): 11/10
Week 11	(Conventional) Monetary Policy	14,15	Exam 2: Tuesday, 11/15 HW 10 (Money, Banks, and the Fed): 11/17
Week 12	(Conventional) Monetary Policy	14,15	Podcast: Tuesday, 11/22
Week 13	(Unconventional) Monetary Policy		HW 11 (Podcast): 12/1
Week 14	Economic Growth	10,11	HW 12 (Monetary Policy): 12/8

## Topic Overview

## I. Part 1: Basic Macroeconomic Variables

- 1) Gross Domestic Product
  - Definition and measurement of GDP
  - Components of GDP: What counts where and why?
  - Shortcomings of using GDP as measures of production and well-being
  - Nominal and Real GDP: Prices vs. Quantities
- 2) Labor Market
  - Labor market measures: Employment, Unemployment, Labor Force, Working-Age Population
  - Types of unemployment
  - Stocks vs. Flows
  - Issues with the measurement of the unemployment rate
  - Types of unemployment: frictional, structural, cyclical, natural
  - Explaining unemployment
- 3) Inflation
  - Measures of the price level
  - Purchasing Power and Inflation
  - Consumer Price Index (CPI): Calculation and biases

- Nominal vs. real variables
- Nominal and real interest rates
- Costs of inflation; winners and losers from inflation

## II. Part 2: Model of the Business Cycle

- 1) Aggregate Demand
  - Slope and shifters: What determines agg. spending in the economy?
- 2) Aggregate Supply
  - Slope and shifters: What determines agg. production in the economy?
- 3) AD-AS Model
  - What determines GDP, unemployment, and inflation over the business cycle
  - Why is the economy in recessions?
  - How does the economy get out of a recession?
- 4) Dynamic AD-AS Model

## III. Part 3: Monetary and Fiscal Policy

- 1) Fiscal Policy
  - What is Fiscal Policy?
  - Automatic Stabilizers vs. Discretionary Fiscal Policy
  - Expansionary and contractionary fiscal policy
  - Multipliers
  - Limits to Fiscal Policy
- 2) Money
  - Why do we need money?
  - Functions of money
  - What is money and which money do we have?
  - Measurements of money
  - How do banks create money?
- 3) The Federal Reserve System
  - Establishment of the Federal Reserve
  - Functions of the Federal Reserve
- 4) Monetary Policy
  - Goals of Monetary Policy
  - Monetary Policy Tools
  - Monetary Policy Target
  - Contractionary and Expansionary Monetary Policy

## IV. Economic Growth

- 1) Economic Growth Model
  - Growth Rates, Rule of 70
  - Determinants of Long-Run Growth
  - Labor Productivity and its determinants