

## EC209 - Intermediate Macroeconomic Theory

Pedro de Araujo

Palmer Hall 015 - Block 2 - Fall 2014

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CONTACT INFORMATION      *Office:* Palmer Hall 114i  
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COURSE WEBSITE      <http://faculty1.coloradocollege.edu/~pdearaujo/ec209.html>

OFFICE HOURS      Monday to Friday from 8:00 to 9:00 or by appointment

COURSE PREREQUISITES      Principles of Microeconomics (EC151), Principles of Macroeconomics (EC152), and Calculus 1 (MA125/126)

COURSE OBJECTIVE      Macroeconomics studies the movements and relationships between aggregate economic variables. The discipline has two important objectives: first, it strives to understand long run paths of aggregate output (growth theory), that is, what are the determinants of sustained increases in living standards of countries? And are poorer countries catching up to rich countries? Second, it studies short run fluctuations around potential output (business cycle theory), that is, why does output fluctuate around its long run path? Also, can the government use fiscal or monetary policy to smooth out these cycles?

These are questions we will begin to answer in this class. The objective here is therefore to introduce you to macroeconomic theories of growth and business cycle by solving simple models and discussing its implications for policy.

Since modern macroeconomic theory relies heavily on microeconomic foundations, most models are set up as utility maximization problems. That is, a representative agent maximizes lifetime utility subject to a lifetime budget constraint. In order to successfully solve such models, we will have to master the technique of constraint optimization; therefore, we will have to review calculus (derivatives) and algebra.

The goal in this class is for you to make the leap from what you learned in your principles of macro course to a more substantial understanding of modern macroeconomic theory and its applications. This will give you the necessary tools to begin to successfully understand more sophisticated and specific topics in macroeconomics.

COURSE STRUCTURE      This course will be a mixture of lectures, activities, and discussions. We plan to introduce important concepts through lecture usually during the first half of class and use activities such as problem solving sessions, discussions, and others to solidify these concepts during the second half of class. Class will start at 9:00.

At 10:30, we will have a 10 minute break and then resume class until 12:00.

REQUIRED TEXTBOOK Williamson, Stephen D.: "Macroeconomics," Pearson Addison-Wesley, 5th ed., 2013

OPTIONAL TEXTBOOK Dowling, Edward, "Schaum's Outline Introduction to Mathematical Economics," McGraw-Hill Irwin, 3rd ed., 2000

COURSE ASSIGNMENTS AND WEIGHTS  
Three exams - 22% each  
Three long problem sets - 9% each  
Participation and Self Reflections - 9%

GRADE DISTRIBUTION	A	100-94	B	88-82	C	77-72	D	60-50
	A-	94-90	B-	82-79	C-	72-69	NC	50-0
	B+	90-88	C+	79-77	D+	69-60		

EXAMS There will be three exams in this class. All exams are take-home open-book open-note; however, no collaboration is permitted. You will have up to 8 hours to complete each exam. However, each exam is tailored for you to finish in no more than 4 hours. Only clarification questions are permitted during the exam.

PROBLEM SETS There will be 3 long problem sets in this course. These problems are designed to get you to practice your problem solving skills. They will be variations of problems solved in class. You are strongly encouraged to work and hand in each assignment in groups of no more than 4 students. You will have access to every answer from every problem before every exam.

PARTICIPATION Throughout the block, you will be required to actively participate during class. I will keep score of your participation and assign you a participation grade accordingly. THIS PORTION OF YOUR GRADE IS NOT A POPULARITY CONTEST AND EVERYONE SHOULD HAVE OPPORTUNITIES TO CONTRIBUTE; I RESERVE THE RIGHT TO STOP OR CALL ON ANYONE AS I SEE FIT. Also, you will be required to attend departmental events that involve research presentations (seminar series events and some food for economic thought events). I will make sure to let you know which of these events are required.

SELF-REFLECTIONS Throughout the block, you will have many self reflective activities that you are required to complete. These activities are designed to get you to reflect about the class, your study habits, organization, and your ability to think about how you think. The hope here is that you develop individualized learning processes that you can transfer to other classes and other experiences you will encounter in the future.

TENTATIVE COURSE OUTLINE	<p><b><u>Week 1:</u></b> Solow Growth Model (chapter 7) Growth Accounting (chapter 7) Endogenous Growth Models (chapter 8)</p> <p><b><u>Week 2:</u></b> <b>Exam 1</b> One Period Model: Work-Leisure Decision (chapter 4) One Period Model: Closed Economy (chapter 5) Models with Unemployment (Search) (chapter 6)</p> <p><b><u>Week 3:</u></b> <b>Exam 2</b> Two Period Models: Consumption-Savings Decisions (chapter 9) Some Applications - credit market imperfections, social security (OLG models) - (chapter 10) Real Intertemporal Model (AD-AS) (chapter 11)</p> <p><b><u>Week 4:</u></b> Monetary Intertemporal Model (chapter 12) - if time permits Monetary Policy (chapter 17 &amp; chapter 18) - if time permits</p> <p><b>Exam 3</b></p>
DUE DATES IN CHRONOLOGICAL ORDER	<p>Problem Set 1 - Friday, October 3 Exam 1- Monday, October 6 Problem Set 2 - Monday, October 13 Exam 2 - Tuesday, October 14 Problem Set 3 - Monday, October 20 Exam 3 - Tuesday, October 21 (after class)</p>
ATTENDANCE	Attendance is not mandatory; however, do not expect us to cover material taught in class during office hours if you were not present for that particular day unless you have proper documentation justifying your absence.
CHEATING	For every assignment in this course you must follow CC's honor code. If you have not yet done so, we encourage you to read the honor code, which can be found at the Pathfinder under Honor Council Constitution. The penalty for cheating in this course is a final grade of no credit (NC).
ACCESSIBILITY NEEDS	If you have a disability and require accommodations for this course, please speak with me by no later than Wednesday, October 1, so that your needs may be appropriately met. If you have not already done so, you will need to register with Accessibility Resources (Learning Commons in Tutt Library, 227-8285), the office responsible for coordinating accommodations and services for students with disabilities.