

# **NORTHWESTERN UNIVERSITY**

## **Advanced Topics in Macroeconomics 316**

Fall, 2021

Professor Martin Eichenbaum

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### **BRIEF COURSE DESCRIPTION**

This course examines the causes and consequences of growth and fluctuations in aggregate economic activity. The course will also provide you with an introduction to advanced methods of analysis in macroeconomics.

### **TEXTBOOK AND CASE PACKET**

The textbook for the course is *Advanced Macroeconomics*, fifth edition, by David Romer (McGraw Hill). I will also distribute handouts via the course web page. If you can find an old edition of Romer that's cheaper, you should be fine.

### **EVALUATION**

The grade in this course will be based on a set of Homework Problems (40%), a Midterm Exam (30%) and a Final Exam (30%).

The midterm will be on Oct. 25 (I will teach that week on Oct 29)

With one exception, recitations will be held on Friday, 3:30 – 4:50.

The exception is that Laura will have a recitation on Nov 3 and I will teach class on Nov 5.

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## THE USE OF MATH IN THIS COURSE

Romer's textbook and some of the readings use a fair amount of math. This should not intimidate you. I will provide you with handouts on the math and go through all derivations in class. In addition, I will provide alternative non-math based derivations of the material that's relevant for the applications that we'll cover. All of the readings, except for Romer, will be available on the course web page. There is no way we will get through all of the material on the syllabus!

### Syllabus

1. The Solow Growth Model and Applications.
  - Romer, Chapter, 1.
2. Optimizing Dynamic Models of Growth
  - Romer, Ch. 2
3. Endogenous Growth
  - Rebelo notes (posted on Canvas)
4. Basic Real Business Cycle model
  - Romer, Ch. 5
  - Class notes (posted on Canvas)
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5. Asset pricing models
  - Cochrane, Ch.2 (posted on Canvas)
  - Class Notes ((posted on Canvas)
6. Labor Market Models and Unemployment
  - Romer Chapter 11
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7. Covid and the Macroeconomy
  - [The Macroeconomics of Epidemics](#) (March 2020, with Sergio Rebelo and Mathias Trabandt). [Matlab code](#) and [Non-technical summary](#) (Kellogg Insight)