

# CALIFORNIA STATE UNIVERSITY, FULLERTON Department of Economics

#### **ECONOMICS 503 – Advanced Macroeconomics**

Spring 2019

Instructor: Fang Zhang, Ph.D. Office: SGMH3389

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Phone: (657) 278-8216 appointment

Course Website: TITANIUM

# **Course Offering Information:**

M: 7:00 – 9:45PM, SGMH 2501; Schedule #: 12645; Section: 01

# **Course Catalog Description:**

Advanced treatment of long run economic growth models. Short run economic fluctuations and business cycle models. General equilibrium models. Dynamic inter-temporal optimization. Theories of consumption and saving. Models of unemployment and inflation. Monetary and fiscal policy.

# **Course Description and Objectives:**

The course is an advanced introduction to macroeconomic theory and application. It studies important questions about economic growth, business cycles, and economic policy. Topics include economic growth, consumption and saving, general equilibrium modeling, business cycle models, and economic policy.

Macroeconomics is a relatively young and quickly developing field. Schools of thought within the field differ in their methodological approaches and policy recommendations. The focus of this course will not be on a set of fixed conclusions about how the economy works, but on the fundamental concepts, empirical and theoretical modeling techniques, and the central models that have driven the progress of modern macroeconomics. The intuition and tools gained should help you to model ideas of your own and do independent research on macroeconomics.

#### **Prerequisites:**

- You should have classified graduate status in Economics.
- You should have taken intermediate macroeconomics (ECON320 or equivalent) and mathematical economics (ECON441) before you take this class and also have taken calculus (Math135 or equivalent) as a prerequisite for ECON441.
- It is helpful, though not necessary, to have taken intermediate microeconomics (ECON310 or equivalent) and an introductory-level course in statistics or econometrics, such as ECON440.
- You should also be comfortable with multi-variable algebra and rearranging equations.

# **Textbooks and Readings:**

The following is the primary reference book for this course:

• Romer, David (2012), *Advanced Macroeconomics*, 4<sup>th</sup> edition. ISBN: 978-0073511375. The newest 5<sup>th</sup> edition of the textbook was published in 2018. The selection of the 4<sup>th</sup> edition is made based on the considerations of the cost difference between the editions and the content similarity on the chapters that will be covered.

In addition, the following book is a good reference for economic growth theories and empirics that we will cover during the first few weeks:

 Jones, Charles and Dietrich Vollrath (2013), Introduction to Economic Growth, 3<sup>rd</sup> edition. ISBN: 978-0393919172.

Meanwhile, the following texts are helpful background sources as your occasional technical references or reminders of the basics of macroeconomics:

- A standard intermediate macroeconomics textbook, such as Mankiw's *Macroeconomics*, Jones's *Macroeconomics*, and Abel, Bernanke, and Croushore's *Macroeconomics*. It is expected that you are familiar with majority of the material delivered in these books.
- Chiang, Alpha and Kevin Wainwright, *Fundamental Methods of Mathematical Economics*. You may find it to be a good technical reference. Another good technical reference is Simon and Blume's *Mathematics for Economists*.
- Stock and Watson, *Introduction to Econometrics*, for reviews of basic statistics, probability and linear regression analysis.

#### **Grading:**

- Your overall course grade will be determined by a combination of exams and problem sets. The weights to determine your course grade will be:
  - 35% Midterm Exam
  - 35% Final Exam
  - 30% Problem Sets
- Letter grades will be assigned using the plus/minus system according to the following scale:
  - A range (A+, A, A-): 90 100%
    B range (B+, B, B-): 80 89%
    C range (C+, C, C-): 70 79%
    D range (D+, D, D-) or lower: < 70%</li>
- I reserve the right to curve the grades at the end of the semester. In the case that I curve, your overall grade will be no worse than the grade determined by the above scale.

## **Problem Sets**

- There will be about 5 problem sets posted on TITANIUM.
- You will have about one week to complete each problem set once it is posted. It is important that you work on the problem sets to keep up with the pace of the course and prepare for the exams.
- You are encouraged to discuss the problems with each other and study in groups; however, work submitted for a grade must be that of the individual student.
- Problem sets grades will be assigned based on the following scale: incomplete (0%), check minus (60%), check (80%), and check plus (100%).
  - Check plus (✓+): completes all the problems assigned, commits no mistakes or very few mistakes in the answers
  - Check(✓): completes all the problems assigned and shows a reasonable attempt to obtain the correct answers
  - Check minus(✓-): shows a reasonable attempt in completing the problems assigned but many answers are incorrect
  - Incomplete: shows poor effort in completing the problem set or fails to turn in the problem set

#### **Exams and Exam Policy:**

- There will a midterm exam held in class. The exam date will be announced, but it will be most likely around the 9<sup>th</sup> week (March 18).
- The final exam will be held on May 13, 7:30 9:20PM, according to the University's final exam schedule.

• <u>Make-up Policy</u>: Make-up exams are generally not allowed. I would consider them only under extreme circumstances, such as illness or other emergency of which I should be notified immediately, if and only if you present proper documentation to verify the circumstance. Any make-up exam should be taken within one week of the exam date.

#### **Other Information and Statements:**

#### **Academic Dishonesty**

Academic honesty is highly expected and any violation will not be tolerated. For University policy and information about academic dishonesty, see

 $\frac{http://www.fullerton.edu/integrity/student/AcademicIntegrityResources.php}{http://www.fullerton.edu/senate/publications} \ policies \ resolutions/ups/UPS% 20300/UPS% 20300.021.pdf.$ 

#### Students with Disabilities

The University requires students with disabilities to register with the Office of Disabled Student Services (DSS), located in UH-101 and at (657) 278 - 3117, in order to receive prescribed accommodations appropriate to their disability. Students requesting accommodations should inform the instructor during the first week of classes about any disability or special needs that may require specific arrangements/accommodations related to attending class sessions, completing course assignments, writing papers or quizzes/tests/examinations. For more, see <a href="http://www.fullerton.edu/DSS/">http://www.fullerton.edu/DSS/</a>.

# **Emergency Policy**

All students should be aware of what needs to be done in the case of an emergency, such as an earthquake, a fire, or other disasters, natural or otherwise. Be sure to look at the <u>CSUF Emergency Preparedness website</u> for critical information about your safety.

#### Message from the Mihaylo College of Business and Economics (MCBE):

The programs offered in Mihaylo College of Business and Economics (MCBE) at Cal State Fullerton are designed to provide every student with the knowledge and skills essential for a successful career in business. Since assessment plays a vital role in Mihaylo College's drive to offer the best, several assessment tools are implemented to constantly evaluate our program as well as our students' progress. Students, faculty, and staff should expect to participate in MCBE assessment activities. In doing so, Mihaylo College is able to measure its strengths and weaknesses, and continue to cultivate a climate of excellence in its students and programs.

# COURSE OUTLINE 1 AND READINGS

#### **I. Economic Growth Theory** (4 weeks)

## 1. The Solow Growth Model and Growth Accounting

#### Romer, Chapter 1

Optional Reading:

Jones and Vollrath, Chapter 1, 2, 3, 10

Solow (1956), A Contribution to the Theory of Economic Growth.

Solow (1957), Technical Change and the Aggregate Production Function.

Mankiw, Romer, and Weil (1992), A Contribution to the Empirics of Economic Growth.

Romer (1990), Endogenous Technological Change.

## 2. Endogenous Growth Theory

## Romer, Chapter 3

Optional Reading:

Jones and Vollrath, Chapter 4, 5, 9

P. Romer (1986), Increasing Returns and Long-Run Growth.

P. Romer (1990), Endogenous Technological Change

## **II.** Consumption Theory and Permanent Income Hypothesis (2 weeks)

# Romer, Chapter 8

Optional Reading:

Friedman (1957), A Theory of the Consumption Function.

Hall (1978), Stochastic Implications of the Life Cycle-Permanent Income Hypothesis: Theory and Evidence.

Campbell and Mankiw (1989), Consumption, Income, and Interest Rates: Reinterpreting the Time Series Evidence.

#### III. Infinite-horizon and Overlapping-Generations Models (3 weeks)

#### 1. Ramsey-Cass-Koopmans Model

#### Romer, Chapter 2

Optional Reading:

Ramsey (1928), A Mathematical Theory of Saving.

Cass (1965), Optimum Growth in an Aggregative Model of Capital Accumulation.

Koopmans (1965), On the Concept of Optimal Economic Growth.

#### 2. Diamond Model

#### Romer, Chapter 2

Optimal Reading:

Diamond, 1965, National Debt in a Neoclassical Growth Model.

Barro, 1974, Are Government Bonds Net Wealth?

#### IV. Theories of Economic Fluctuations (5 weeks)

# 1. Real Business Cycle Theory

Romer, Chapter 5

<sup>1</sup> Tentative schedule only. I reserve the right to change this course outline at any time during the semester.

Optimal Reading:

Kydland and Prescott (1982), Time to Build and Aggregate Fluctuations.

King, Plosser, and Rebelo (1988), Production, Growth and Business Cycles: I. The Basic Neoclassical Model.

# 2. Rational Expectations, the Lucas Imperfect-Information Model, and Philips Curve Romer, Chapter 6

Optimal Reading:

Lucas (1972), Expectations and the Neutrality of Money.

Phelps (1970), Microeconomic Foundations of Employment and Inflation Theory.

## 3. New Keynesian Theory and Monetary Policy

# Romer, Chapter 7

Optimal Reading:

Blanchard and Kiyotaki (1987), Monopolistic Competition and the Effects of Aggregate Demand.

Taylor (1979), Staggered Wage Setting in a Macro Model.

Taylor (1980), Aggregate Dynamics and Staggered Contracts.

Calvo (1983), Staggered Prices in a Utility-maximizing Framework.