ECON 7344 — MACROECONOMIC THEORY II

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Sessions: Friday 9.30-11 in 212
WEB-page: http://www.uh.edu/ bsorense
Hours: You can usually drop by anytime, sometimes I am out Thursday-Friday and sometimes I work home in the morning, so email for an appointment if you want to be sure (email is better than talking to me, I use my inbox to keep track of appointments).

Learning Outcomes:

- Students will learn, through lectures, homeworks, and TA-sessions, to master macroeconomic theory at a level that, in conjunction with other core-classes, enables the students to read research articles in leading journals.

- Students will develop their technical skills as it relates to macroeconomic theory to the level expected in graduate economics programs.

- Students will learn the basic ideas of stochastic macroeconomics.

Course Description

Readings:
Textbooks: Romer [R]: Advanced Macroeconomics, 4th edition (or newer if it is out), McGraw-Hill Irwin latest edition; Obstfeld and Rogoff [OR]: Foundations of International Macroeconomics, MIT 1996. The main textbook is R. From OR we will cover (parts of) Chapter 5 "Uncertainty and International Financial Markets" (the models are formulated in terms of countries, but are valid in many other settings, e.g., in terms of two consumers rather than two countries).
Note that, in principle, you are only required to understand the class-notes, so—for this class (pre-core-exam) do not read material in the book that is not covered in class unless you feel it helps you understand those topics.
Notes for many lectures will be posted on the class WEB-page. The class WEB-page will be accessible from my home page.
Material covered: This course complements Econ 6344. We briefly discuss Keynesian models and some criticisms of these (R. Chapters 5 and 6 because I want to make sure everybody understand this basic material. The core of the course Rational Expectations models (in particular the PIH consumption model) which student will have been exposed to but in this course we introduce rigorous time series tools which are essential for almost all current work in macroeconomics. At the end of the semester we cover the Arrow-Debreu model of perfect capital markets under uncertainty in (mainly) a two-period two states-of-the world setting (O.R. Chapter 5, although not all

subsections). All intuition for infinite period/infinite states model can be gained from this simple framework.

The material covered follows a (somewhat) logical progression:

- We begin with time series methods, which are the main tool in modern macro. We then briefly review Keynesian General Equilibrium model. The logic of demand determined output still is central for the working of large-scale forecasting models (at least in recessions) and most theoretical work, even if highly complicated, still assumes ad-hoc price rigidity. This includes the Phillips curve and Friedman's extension to include expectations.

- We then cover some stylized (to simplified to take to the data) models that highlight the role of perfect/imperfect competition and Lucas imperfect information model which is somewhat outdated but which made a lot of methodological innovations that underlies current models.

- We take a little historical detour and cover Friedman's consumption function which underlies the modern PIH model.

- Then the most used tool in all of macro and finance: the Euler equation. You have seen it before we here we discuss its most general form.

- Armed with the Euler equation we cover the PIH consumption model in detail.

- Then we cover uses of Euler equations in finance, including a discussion of how older theories— the efficient marker hypothesis and the CAPM—can be seen in view of the Euler equation.

- I cover briefly a paper of my own in the JPE which argues that the PIH probably fails in fitting aggregate U.S. data so well because if ignores the general equilibrium restriction and suggest a test using state level data.

- The rest of the semester, we attach General Equilibrium issues head on following the peda-gogical two-period, two-agent set-up of Obstfeld and Rogoff. (When you fully understand this setup it is easy to understand many period, many agent versions and exam will sometimes ask questions in these more general frameworks.)

I will also assign lectures notes.
You may want to consult last year's detailed syllabus for more specifics. Be aware that I make no commitment to follow last years class in detail, although I have no major changes planned.

Grading and assignments: There will be a final (likely in class on the last day of teaching, two midterms, and 8-10 homework assignments.
General advice: Make sure you understand the material after each topic is covered (don't suffer from the illusion that you will understand it better when exam-time draws near). If the point of some topic is not clear, ask questions in class and *see me in my office*—this is part of good study habits and without good study habits graduate studies don't go far. It is considered your duty to

seek advice.

Also: Make sure you know about convex and concave functions (Jensen's inequality) and I expect you to be understand the normal and log-normal distributions (many students have failed my exams because they didn't take the few minutes to memorize how to take the expectation of a log-normal).