Prof. Joe Haslag

Econ 9454
Macro Theory II
Spring 2023

Office : 324 Professional Bldg
email: haslagj@missouri.edu
phone: 2-3483
office hrs: T 1:00 – 2:30 and by appt.

The purpose of this course is to further develop one's understanding of the core theories in macroeconomics. Because macroeconomics focuses on theories that account for aggregate behavior, the basic building block for this course will be general equilibrium. We will cover a variety of topics. The Ljungqvist and Sargent (L&S) book will serve as a guide for this discussion.

Grades are determined by performance on the midterm and final exam. The midterm accounts for 40 percent of your grade while the final exam accounts for the remaining 60 percent. I will provide problem sets throughout the semester for practice. I strongly suggest you work on the sets even though I will not ask you to submit them for grades.

Topic 0: We will not be covering this topic in class. The first section on "basic results in dynamic optimization" comes from notes developed by Prof Rody Manuelli., He writes down a simple 2-good problem model to familiarize ourselves with general equilibrium, the 1st and 2nd welfare theorems, and conduct some comparative statics. You might have learned this in math econ, but I hope the set of notes provides you additional understanding of the relationship between optimization techniques and the underlying economics.

Suggested Reading: There is an excellent monograph by Prof Rody Manuelli. You can obtain this off his webpage, entitled "Notes on Discrete time Economic Models: The Growth Model." I will give you these notes upon request.

Topic 1: A deeper dive into dynamic programming.
Read Chapte1 in L&S, skim Chaps 3 and 4 in L&S, it will be useful to look over Chap 3 and Section 4.1 in Stokey and Lucas' *Recursive Methods in Economic Dynamics*. We will not go into that level of detail, but if you are interested in doing macroeconomic research, the underlying mathematics will be important background material.

Topic 2: Extend the basic proofs to model economies with more general time structures. Basically, focus on market completeness in the Arrow-Debreu setup and in the sequential market setup.
Chaps. 8 and 12 in L&S

Topic 3: Ricardian Equivalence and borrowing limits
Read Chap 10 in L&S

Topic 4: Asset pricing models
Chaps 13 and 14 in L&S.

Topic 5: The Ramsey Problem
Chap 16 in L&S

Topic 6: Bewley economies, or models with self-insurance
Chap 17 in L&S

Topic 7: Recursive contracts
Chap 19 in L&S