Learning Goals

Intermediate Macroeconomics:

The goal of intermediate macroeconomics is to provide students with a rigorous overview of modern macroeconomics. The course builds on the themes introduced in the principles class. The principal objective of this class is to equip students with the tools and ideas necessary to understand the aggregate economy and to make informed opinions about different economic policies.

Whereas the principles course is aimed more at an intuitive introduction to macroeconomics, the intermediate course should focus more on the tools of modern macroeconomics. To this end, the course should build up models of the economy resembling (in a simplified fashion, of course) what might be taught in a graduate level class. Students should be expected to use some basic mathematical tools (algebraic manipulations, solving systems of equations, simple differential calculus, etc.). As modern macroeconomics is quantitative, students should also be expected to do some quantitative exercises in a program such as Microsoft Excel.

Students should be taught that modern macroeconomics is one cohesive structure deriving from a simple, dynamic neoclassical model. The distinction between "short run" and "long run" is not so much about time, but rather about frictions – are wages and prices sticky? are some factors of production fixed? Frictions are introduced along the way to make the model better fit the data. As frictions are introduced, the desirability of different policies will be emphasized.

In addition to learning about macroeconomic policies, an important objective of this course is to equip students with tools and training to be exposed to the research frontier. To that end, some effort should be made to expose students to modern macroeconomic research, with some particular emphasis on the methodological debates that have sprung up in the wake of the recent crisis period.

Specific Learning Goals:

- (1) Students will receive a rigorous treatment of modern models of economic growth, building off of the Solow Model. They will learn the concepts of the steady state, convergence, and growth accounting. They will be exposed to research on cross-country differentials in standards of living and policies aimed at improving growth and standards of living.
- (2) Students will be exposed to a full treatment of modern theories of consumption. These theories are fundamentally dynamic. Students will learn about the permanent income hypothesis, the random walk hypothesis, life cycle saving, and liquidity and credit-market constraints. This analysis will make use of basic differential calculus and indifference curve/budget line diagrams.
- (3) Students will study the theory of the firm in depth. They will learn about production functions, marginal products, and will be able to characterize profit maximizing behavior by firms.

- (4) Students will learn that saving/investment is fundamentally a dynamic tradeoff, and that the real interest rate summarizes the costs of that dynamic tradeoff.
- (5) Students will learn the concept of competitive general equilibrium in macroeconomics: a set of prices and quantities such that all actors are behaving optimally and all markets clear.
- (6) Students will study fluctuations in a simple, dynamic neoclassical model of the economy. They will be exposed to some basic business cycle "facts" and will "take the model to the data", observing where it does well and where it fails.
- (7) Students will learn extensions of the neoclassical model, chiefly Keynesian frictions associated with sticky wages and prices. They will study monetary policy in depth, with an exposure to the rules vs. discretion debate, commitment, and the Taylor rule.
- (8) Students will learn about fiscal policy, with emphasis on the idea of Ricardian Equivalence. Students will learn about the dangers of large and persistent deficits.
- (9) Students will receive a modern treatment of the theory of unemployment and will discuss the frictions giving rise to equilibrium unemployment.
- (10) Students will study open economy versions of the dynamic economic models discussed above.