An Introduction to Macroececonomic with Household Heterogeneity: Syllabus

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1 Organization

1.1 Organizational Details

- **Class Title:** An Introduction to Macroeconomics with Household Heterogeneity
- **Readings:** I will mainly rely on my lecture notes and original articles. Please refer to the table of contents for the articles we plan to cover in detail, and to the bibliography of the lecture notes for further references
- **Suggested Background Reading:**
  1. Angus Deaton "Understanding Consumption" Oxford University Press, 1992
  2. Orazio Attanasio "Consumption, " in Handbook of Macroeconomics, Vol. 3B, Elsevier, 1999.
  3. J. Heathcote, K. Storesletten and G. Violante (2009), "Quantitative Macroeconomics with Heterogeneous Households," *Annual Review of Economics*, 1, 319-354.
  4. F. Guvenen (2012), "Macroeconomics with Heterogeneity: A Practical Guide," *Federal Reserve Bank of Richmond Economic Quarterly.*
- **Instructor:** Dirk Krueger, dkrueger@econ.upenn.edu

1.2 Course Outline and Overview

This is a course in quantitative macroeconomics with heterogeneous households. It first covers basic models of a single household's intertemporal consumption (and labor supply) allocation decision under various assumptions about the life horizon and labor income process of the household as well as the capital market

structure. However, this year I will mainly focus on general equilibrium versions of these models as well as their applications to public finance and household finance. For details see the attached table of contents for the course.

1.3 Goal of the Course

I want to prepare you to write your first research paper and, eventually, a dissertation in this area, which is overlaps the fields of macroeconomics, labor economics and applied microeconomics. After having taken this course you will know how to write down dynamic consumption models, solve them (numerically, if required) in general equilibrium, map these models to the data and use them for applied policy question. I also hope expose you to open research questions in this area so that you, if you wish, can apply the techniques acquired and the substance studied in this course to start your own research agenda. **Most importantly, we want to have fun with this course!!!**

2 Tentative Outline of the Course

Date	Topic	Notes
Lecture 1	Motivation and Data	Chapter 1-2
Lecture 2	Standard Complete Markets: Allocation and Asset Prices	Chapter 3.1
Lecture 3	Standard Complete Markets: Empirical Tests	Chapter 3.2-3
Lecture 4	Standard Incomplete Markets (SIM) in PE: Certainty Equivalence & PIH	Chapter 4.1-2
Lecture 5	SIM in PE: Precautionary Saving I: Prudence & Liquidity Constraints	Chapter 4.3-4
Lecture 6	SIM in PE: Precautionary Saving II: Theory, Computation,Implications	Chapter 4.5-7
Lecture 7	SIM in GE: Stationary Equilibrium	Chapter 6.1
Lecture 8	SIM in GE: Applications to Bankruptcy/Foreclosure	Chapter 6.2
Lecture 9	SIM in GE: Transition Paths	Chapter 6.3
Lecture 10	SIM in GE: Transition Paths: Applications to Public Finance	Chapter 6.3
Lecture 11	SIM in GE: Aggregate Shocks	Chapter 6.4
Lecture 12	SIM in GE: Aggregate Shocks: Applications to Crises	Chapter 6.4
Lecture 13	Limited Commitment Models: Idea and an Example	Chapter 7.1-5
Lecture 14	Limited Commitment Models: Stationary Equilibrium	Chapter 7.6