Department of Economics
Graduate Classes
Fall Semester 2019

TENTATIVE

890: Topics in Economics
881: Topics in Applied Microeconomics
883: Topics in Econometrics
882: Topics in Macroecon/International Finance
885 Topics in Economic Theory

881.04	Topics in Applied Microeconomics *Development Economics I*	Wang, Xiao Yu	F	8:45 - 11:15	8/30/19 - 10/11/19
881.05	Topics in Applied Microeconomics *Development Economics II*	Field, Erica	F	8:45 - 11:15	10/18/19 - 12/6/19
881.13	Topics in Applied Microeconomics *Human Capital*	Hotz, V. Joseph	MW	1:25 - 2:40	8/26/19 - 10/14/19
	This course covers the literature and issues of the Economics of Human Capital, In particular, we cover the economic models of: (1) earnings function and human capital investment; (2) the Roy Model and the Pricing of Skills; (3) the returns to education and schooling and its impacts on earnings; (4) skill formation and human development; (5) effects of school quality; (6) college major choice and its consequences; (7) post-educational skill acquisition & returns to work experience; and (8) structural models of human capital accumulation. These topics and models are core components of the fields of Labor Economics, the Economics of Education and the study of Economic Inequality. For all of the models covered, we study the econometric issues that arise in estimating the parameters of these economic models, such as the rates of return to schooling and schooling quality and the technology of human capital production functions. Special attention is given to econometric consequences of ability sorting and other forms of selection. Students will be expected to read and discuss the papers presented in class and develop proposal for a research paper on a topic related to human capital, where the instructor will help students through each stop of this process. The latter exercise may end up being the start of a field paper.				
881.20	Topics in Applied Microeconomics *Dynamic Discrete Choice*	Arcidiacono, Peter	TTH	10:05 - 11:20	8/27/19 - 10/15/19
	In this module we will work our way up from discrete choice models to dynamic discrete choice models. In dynamic discrete choice modules individuals make decisions today recognizing the impact these decisions have on the value of future decisions. We will pay particular attention to recent advances in how to compute these types of models when unobserved variables are present. There will be a heavy emphasis on programming.				
881.23	Topics in Applied Microeconomics *Intra Household Distribution, Labor, and Marriage Markets*	McElroy, Marjorie	MW	11:45 - 1:00	8/26/19 - 10/14/19
881.24	Topics in Applied Microeconomics *Applications in Labor and Family Economics*	McElroy, Marjorie	MW	11:45 - 1:00	10/16/19 - 12/4/19
881.30	Topics in Applied Microeconomics *Graduate Public Finance I*	Suarez Serrato,	MW	4:40 - 5:55	8/26/18 - 10/14/19
881.31	Topics in Applied Microeconomics *Graduate Public Finance II*	Suarez Serrato,	MW	4:40 - 5:55	10/16/2019 - 12/4/2019

882.03	Special Topics in Macro	Ilut, Cosmin	MW	3:05 - 4:20	8/26/19 - 10/14/19
	Expectations and Macroeconomics				
	This module covers some recent advances in the macroeconomics literature on ambiguity/robust control, which departs from rational expectations modeling and Bayesian learning. Here we study, based on decision theoretical foundations(ambiguity aversion), how agents faced with model uncertainty act on robust decision rules. We will review the main concepts of ambiguity/robust control and we will cover some of its applications to asset pricing, business cycles and optimal policy.				
882.09	Special Topics in Macro	Peretto, Pietro	M	4:40 - 7:10	8/26/19 - 10/14/19
	Economic Growth I				
882.10	Special Topics in Macro	Peretto, Pietro	M	4:40 - 7:10	10/21/19 - 12/2/19
	Economic Growth II				
882.14	Special Topics in Macro	Kehrig, Matthias	T	4:40 - 7:10	10/18/19 - 12/6/19
	Empirical Macroeconomics				
	This course sets you up with the models and tools used in modern macroeconomics. The first part of the course covers standard heterogeneous-agent macro models, including solution meth- ods, the effect of standard real and financial frictions and general equilibrium forces. The second half of the course covers empirical patterns of firm dynamics, reallocation and the quantitative (in)significance of micro-level heterogeneity for macroeconomic outcomes. Assessment will consist of (computational) homeworks, a take-home exam and student presentations. This course builds on Prof. Lanteri's course"Macroeconomics with heterogeneous agents"in that it complements his theoretical and quantitative tools with empirical analysis and leading students on to research projects.				
883.05	Topics in Econometrics	Rosen, Adam	TTH	8:30 - 9:45	8/27/19 - 10/15/19
	Econometrics III (Part 1)				
	This module is designed for Ph.D. students in economics who have finished the first-year graduate econometrics sequence and will pursue theoretical and/or applied econometrics as their dissertation topics. In terms of econometric applications, the main focus of the first part is the estimation and inference for econometric models with finite dimensional parameters based on cross-sectional and dependent data. Examples include ordinary least square, generalized methods of moments (GMM), (quasi) maximum likelihood, quantile regression, etc. On the technical side, we will cover the strategy and technical tools for deriving the asymptotic theory for Mestimators. After establishing the classical theory, we consider a modern perspective on the subject through the theory of empirical processes. The technical training in this part should facilitate further studies on topical courses in microeconometrics, standard time-series econometrics, and/or high-frequency financial econometrics.				

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883.06	Topics in Econometrics	Bugni, Federico	MW	1:25 - 2:40	10/16/19 - 12/4/19

Econometrics III (Part 2)

This module will primarily cover non-linear statistical models, focusing on the asymptotic properties of estimators of parameters of interest. It will first cover general theorems for estimators defined as optimizers of objective functions, such as MLE and GMM, LAD. A second part of the module will be the study of estimation of nonparametric models, and their asymptotic properties. The methods introduced will be further explored in the analysis of widely applied non-linear models, such as binary and multi-nominal choice, censored and truncated regression,
and sample selection models, in both cross-sectional and panel data settings.

885.01	Topics in Economic Theory	Ambrus, Attila	TTH	3:05 - 4:20	8/27/19 - 10/15/19

Micro Theory III (Part 1)

885.05	Topics in Economic Theory	Lewis, Tracy	Th	4:40 - 7:10	10/17/19 - 12/5/19

Theoretical IO

This course reviews recent developments in Industrial Organization and Contract Theory. The course addresses fundamental issues of how firms compete or collude, how markets govern and moderate competition, and how the structure and conduct of rival firms affects market performance and organization. Non cooperative game theory is the organizing principle and analytical tool that is employed to systematically assess theories of competition and as well as competition policy and antitrust regulations. This year the course is designed as an advanced seminar for graduate students and faculty who wish to learn about recent theoretical advances in dynamic and relational contracting and their impact on competition in present day platform, network and two sided markets. The class is tailored to those students interested in developing a dissertation topic in theoretical and empirical IO, contracts, or market design. Those attending this seminar should have a good first year graduate level background in micro theory, game theory and the theory of information economics.

885.06	Topics in Economic Theory	Sadowski, Philipp	TTH	8:30 - 9:45	10/17/19 - 12/5/19

Decision Theory

This module aims to provide the necessary background for research in, or related to axiomatic decision theory, but should also be of interest to students who want to investigate the effect of non-standard preferences in macroeconomic or applied contexts. The first part of the class addresses basic concepts, focusing on choice under risk and uncertainty, including the Ellsberg and Allais paradoxes. In the second part we discuss more recent contributions, including temporal resolution of uncertainty, menu choice, and random choice. The second part of the curriculum is somewhat flexible, allowing us to delve deeper into topics of specific interest. While I use the black/white board for proofs, I also provide handouts with all definitions and results, as well as problem sets. The module is a natural complement to the Behavioral Economics module taught by Todd Sarver, who discusses additional patterns in individual choice. Students are encouraged to take the two modules in sequence.

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890.01 Special Topics — Li, Jia — MW 1:25 - 2:40

Continuous-Time Models in Economics and Finance

This course provides an introduction to continuous-time models used in economics and finance. The course starts with an introduction to basic mathematical tools such as the Brownian motion, Ito's formula and stochastic differential equations. We then discuss the state price density, risk-neutral probability and how to use them to derive the classical Black-Scholes option pricing formula. We further introduce more pricing theory in term-structure models for bonds. Transformation analysis is then introduced for pricing options in general affine models. The course then briefly introduce the optimal stopping problem and its applications in American options.

The second part of the course concerns the optimal consumption and investment problem in continuous time. In this part, we introduce the Hamilton-Jacobi-Bellman equation and discuss the verification theorem for solving the classical Merton's problem. The setting is then extended to a general Markovian setting.

The third part of the course concentrates on continuous-time microstructure models. We discuss versions of Kyle's model and the Glosten-Milgrom models.

890.02 Special Topics — Collard-Wexler, Xu, Daniel — TTH 1:25 - 2:40

Industrial Organization

This class is meant to introduce key concepts and tools in Industrial Organization. We will start by presenting demand estimation, include discrete choice models of demand such as Berry, Levinsohn, and Pakes (1995). The we will look at methods to estimate production and cost functions, including control function methods such as Olley and Pakes (1996). The class will cover IO theory models of competition, such as Salop and Cournot models of competition. Finally, we will discuss topics in vertical markets, such as double marginalization and bilateral bargaining.
