Elective Courses

Fall 2019

ECON-UB.10 Quantitative Microeconomics

Instructor: **Laetitia Placido** – Info: `lplacido@stern`

This course covers a series of advanced microeconomics topics. The goal is to introduce students to important economics issues as well as to a number of quantitative tools commonly used by researchers, managers and policymakers. The set of tools includes, in a special way, game theory – the formal analysis of interdependent behavior. Topics include: Trust and reputation (e.g., how product recalls affect firm value); Contracts (e.g., Intel offers a 15% discount if you commit to buy Intel only); Market segmentation (e.g., using cookies to segment online markets); Auctions (e.g., selling Google's sponsored ads, or selling Treasury Bills); Consumer behavior (e.g., how a product's position in an online site influences its click-through rate; and how sellers should take that into account); Innovation (e.g., patent pools and patent trolls); Networks and platforms (e.g., Amazon, Uber, Airbnb).

ECON-UB.15 Competitive Analysis

Instructor: **TBA** – Info: `lcabral@stern`

This course offers an economics approach to analyzing the way firms make marketing decisions and interact strategically with each other in the marketplace. The main goal of the course is to develop the basic intuition for pricing and other forms of strategic behavior on the part of firms.

ECON-UB.140 Health Economics

Instructor: **Simon Bowmaker** – Info: `sbowmake@stern`

We will apply economic principles and empirical methods to study topics in health and medical care, including the demand for medical care and medical insurance, institutions in the health sector, economics of information applied to the market for health insurance and for health care, measurement and valuation of health, and competition in health care delivery. Our emphasis will be on the United States, with a brief treatment of health economics research in other countries and comparisons of health systems in other developed and less developed countries.

ECON-UB.216 Business and Public Policy

Instructor: **Gian Luca Clementi** – Info: `gclement@stern`

Small and large businesses interact with the various level of government on a daily basis. Governments tax, subsidize, and regulate business activity. In return, businesses attempt to shape public policy by influencing public opinion, by lobbying politicians, and by financing their electoral campaigns. This is why all large companies, among which the household names Airbnb, Amazon, Apple, Cisco, Facebook, and Uber, have sizeable teams uniquely devoted to Public Policy and Government Affairs. This course is about understanding how the business and government worlds affect each other. We will study the economics and politics of anti-trust regulation, environmental regulation, state aid, intellectual property protection, labor market regulation, and trade policy.

ECON-UB.230 Global Macroeconomics

Instructor: **Stanley Zin** – Info: `szin@stern`

This course analyzes current international macroeconomics and financial issues, policies, and events, including current global economic conditions in the United States, Europe, Asia and emerging market economies. We will study in detail the causes and consequences of trade deficits and external imbalances, the causes of currency, banking, and financial crises, the short- and long-term effects of monetary and fiscal policy, the determinants of asset bubbles, credit booms, and financial crises, and the globalization of financial markets.

ECON-UB.232 Data Bootcamp

Instructor: **Ben Zweig** – Info: `bzweig@stern`

Data Bootcamp is about nuts and bolts data analysis. You will learn about economic, financial, and business data, and enough about computer programming to make sense of it. Applications include some or all of: Leading economic indicators, country indicators, bond and equity returns, stock options, income by zip code; "long tail" sales data, innovation diffusion curves, attendance data for plays and sports teams. We will use Python, a popular high-level computer language that's widely used in finance, consulting, and other parts of the business world. "High level" means that it's less painful than most (the hard work is done by the language and its collection of tools), but it's a serious language with extensive capabilities. "Analysis" means primarily graphical descriptions that summarize the properties of data in ways that are helpful to managers.

ECON-UB.233 Macro Foundations for Asset Pricing

Instructor: **Stanley Zin** – Info: szin@stern

The term "business cycles" refers to the ups and downs of the economy: Fluctuations, in other words, in the growth rate of GDP. Prices of bonds, equity indexes, and options on equity indexes are all closely related to these fluctuations. We develop the tools needed to establish a statistical connection between business cycles and asset prices and a theoretical foundation for it. Numerical computations are used to develop the theory in realistic ways. The course gives students a deeper understanding of macroeconomic fluctuations and asset pricing, the tools needed to develop this understanding, and extensive experience programming with Matlab.

ECON-UB.251 Econometrics

Instructor: **Ben Zweig** – Info: bzweig@stern

Econometrics is the application of statistical methods to the discovery of causation in economics. With an example: Simple data analysis tells us that poor countries tend to have high fertility rates and that high-fertility countries tend to be poor. The goal of econometrics is to understand whether it is poverty that leads people to have more kids, or whether people that have more kids are poor as a consequence. Or both. In this course, we will go beyond prediction and statistical tests to begin to understand the causal relationship between variables and how to use data to make the best decisions possible. We will use Python, a popular high-level computer language that is widely used in finance, consulting, and technology. Students will leave this class with a strong understanding of how Econometrics is used in business and be able to effectively generate their own models in a variety of contexts.

MULT-UB.27 The Financial System

Instructor: **Kim Schoenholtz** – Info: kschoenh@stern

Financial systems are complex and rapidly evolving networks centered on key institutions, instruments and markets. This course examines financial systems from the perspective of both financial and economic stability, taking account of the role played by governments and public policy. This includes a focus on the role of central banks and monetary policy, both in normal times and in financial crises. Several broad questions will be addressed in the course: the purpose and organization of a financial system; why and how countries regulate the financial sector; and the goals, tools and challenges of central banks and monetary policy. Along with a working knowledge of macroeconomics and the foundations of finance, this course will provide students an understanding of key aspects of the changing global financial environment.