COURSE DESCRIPTIONS

Finance Courses
B52 FIN 615A/B Research in Finance I/II
The finance group has a very active seminar series that bring about 25 scholars to Olin each year (including job market candidates). The "Research in Finance" course meets once a week for 45 minutes prior to the seminar. The students are asked to read the seminar paper in advance and be ready to discuss different aspects of the paper. Additionally, one student is designated each week as the presenter of the paper. This student presents the questions, methodology, and results in the paper. The presenting student also discusses the main problems that he or she sees in the paper as well as ideas for further research. Following or during the presentation, the class will discuss these different aspects of the paper. Students write and submit a critical report on the paper under consideration, including ideas for further research. The report is graded by the instructor.

B52 FIN 642 Advanced Continuous Time Theory
Covers advanced dynamic asset pricing and portfolio selection in continuous time. Students are required to read some of the classical papers as well as the most recent developments in the field. Lectures emphasize the concepts and technical tools needed to understand these articles and to initiate frontier research in this field.

B52 FIN 643 Information Economics & Corporate Finance Theory
This is a rigorous seminar in individual and corporate economic behavior under conditions of asymmetric information, with application to corporate finance, financial intermediation and accounting. Its purpose is to cover many of the landmark modern developments in information economics as well as some "applications-oriented" papers. The principal objectives are to (i) inform students about the major advances made in the areas mentioned above and (ii) equip them with the analytical tools needed to do theoretical research in the area, including applications in financial economics.

B52 FIN 644 Financial Economics I
The course consists of two parts: basic theory and empirical tests. Topics include utility maximization, stochastic dominance, mean-variance analysis, fund separation, pricing theory, fundamental theorem of asset pricing, and basic continuous-time mathematics.

B52 FIN 647 Topics in Corporate Finance
The course objective is to introduce doctoral students to research in corporate finance and will cover classical topics in corporate finance. We will discuss both theory and empirical work with a focus on theory. Topics covered may include mergers and acquisitions, private equity and venture capital finance, capital structure, corporate governance and control, market microstructure, and incentive design. The class studies theories capable of explaining empirical observations, analyzes the empirical papers testing these theories and includes a detailed discussion of the main empirical methodologies commonly employed in corporate finance.

B52 FIN 648 Independent Study in Finance
Internship must be arranged by the student and approved by the advising faculty member. An outline of objectives must be submitted to the PhD Office prior to enrollment. May be taken a maximum of five (5) times for credit. Credit, variable; fifteen (15) credits combined total.
B52 FIN 649 Directed Readings in Finance
A program of readings developed by and with the approval of one or more members of the Finance faculty. Prerequisite, approval of the Director of the PhD program. Credit, variable. May be taken up to two (2) times for credit; six (6) credits combined total.

B52 FIN 650 Topics in Emerging Markets Finance
This course will discuss the area of emerging markets finance (EMF). The course will highlight the area's importance for finance research, discuss existing empirical evidence, and highlight some important open questions for future research. This course is designed for PhD students who are looking for research topics and the empirical tools necessary to implement them. Apart from an introduction to the area, six main topics will be covered: finance and growth, determinants of financial development, globalization, business groups, stealing and corruption, and raising capital.

Other Courses
MEC 625 Industrial Organization I
Starting from the 1970s, an increasing number of economic theorists have become interested in Industrial Organization. Non-cooperative game theory became the standard tool to analyze strategic conflicts and it lent itself naturally to the analysis of industrial organization topics (while until then the tools of general equilibrium analysis were not ideal to tackle the same issues). The course aims to give you a concise but solid background of the classical results in IO theory, and to then highlight some very recent contributions to the same literature. We will give particular attention to the topics that are complementary to empirical analysis.

Since IO theory has become increasingly formal in the last years, familiarity with the theoretical game tools covered in the first year Micro sequence is essential. The best reference for theoretical game tools is the book A Course in Game Theory by M.Osborne and A.Rubinstein (1994) (Game Theory by D.Fudenberg and J.Tirole is also good). To avoid wasting time going over the most basic materials, you should at least have read the relevant parts of the Tirole book before class.

MEC 626 Industrial Organization II
The course focuses on research methods in empirical industrial organization. Every week we will cover 1-2 recent empirical papers centered on a particular area of Industrial Organization. We will discuss in detail the research question, relevant theories, sources of identification, data, estimation techniques, and economic significance. There is no textbook.

MGT 600A Teaching Business
The course is designed to assist doctoral students in advancing their teaching capabilities. The format will include in-class discussions, group work, creating an "out-of-class" video, creating a video of an "in-class" session, presenting to the class, and constructively critiquing the work of others.

B53 MGT 601 Doctoral Prep: University Teaching
Two (2) credits are required for the PhD. Students must provide an Olin professor 30 hours of assistance in the teaching function; includes, but is not limited to, conducting help sessions, grading, and developing lectures or exams. Maximum of eight (8) credits allowed. Hours performed during this course do not count towards RA/TA requirements. Credits will count towards teaching requirement of the Graduate School of Arts & Science.
B53 MGT 605 Research Internship
Three (3) credits are required for the PhD. Under the direction of a faculty member, students will work (and be graded) on their own research project. This requirement will be completed when students are at candidacy and preparing a dissertation proposal. Internship must be arranged by the student and approved by the advising faculty member. An outline of objectives must be submitted to the PhD Office prior to enrollment. An additional nine (9) credits may be taken; maximum of twelve (12) credits allowed.

B53 MGT 607A Teaching Presentation Skill Workshop
This course focuses on developing presentation skills for the classroom and for conference papers. Students will deliver three presentations and write a summary performance evaluation. This course is required for all students prior to graduation in compliance of the teaching requirement governed by the Graduate School of Arts & Science.

B53 MGT 610 Dissertation
Maximum of twelve (12) credits allowed, six (6) per semester. Prerequisite: submission of Title, Scope, and Procedure Form and successful Proposal of dissertation.

B53 MGT 620 Empirical Methods in Business
The objectives of this course are to train Ph.D. students in different business disciplines to understand: how to use data to address research questions, how to build econometric models that can be applied to data, and how to estimate the econometric models using some statistical packages. This course emphasizes on empirical data handling and estimation issues. Prerequisites: students are expected to have basic statistical knowledge such as random variables and distributions, tests of statistical hypothesis, basic linear regression and maximum likelihood estimation.

Core Foundation Courses

L11 Econ 503 Microeconomics I
The first of a two-semester graduate sequence in microeconomic theory. The courses cover the determination of relative prices and quantities exchanged of final products and factors of production. The first semester considers production and costs, supply of output and demand for inputs, demands for final products, market organization, time and capital. Fall.

L11 Econ 504 Microeconomics II
The second of a two-semester graduate sequence in microeconomic theory. The second semester considers the further development of individual consumer behavior, aggregated demand, general equilibrium analysis, Leontief models, consumer's surplus analysis, social choice, and expected utility analysis. Spring.

L11 Econ 511 Quantitative Methods in Economics I
Study of those topics of mathematics of special usefulness in economic research. Selection and ordering of topics will vary with level of student preparation but will usually include the following: Vectors, matrices, lines mappings; their manipulation and elementary properties; elementary topology, and elements of multidimensional calculus. Fall.

L11 Econ 512 Quantitative Methods in Economics II
Introduction to mathematical statistics designed to provide a background for the study of econometrics. Selection of topics will usually include: probability, introduction to distribution theory, including limiting
distributions and distributions of quadratic terms, Bayes Theorem, and hypothesis testing. 3 class hours a week. Fall.

L11 Econ 513 Introduction to Econometrics
Classical multiple regression analysis and an introduction to generalizations useful in empirical research in economics, including a framework for dealing with problems of multicollinearity, specification error, heteroskedasticity, serial and contemporaneous correlation, identification and consistent estimation in simultaneous equation models. Spring, odd years.

L11 Econ 516 Applied Econometrics
Introduction to econometrics as it is applied in microeconomics and macroeconomics (modular). Topics related to the analysis of microeconomic data include maximum likelihood estimation and hypothesis testing; cross-section and panel data linear models and robust inference; models for discrete choice; truncation, censoring and sample selection models; and models for event counts and duration data. Topics related to the analysis of macroeconomic data include basic linear and nonlinear time series models; practical issues with likelihood-based inference; forecasting; structural identification based on timing restrictions and heteroskedasticity; and computational methods for hypothesis testing and model comparison. Prerequisite: Econ 512. Spring, even years.

Course descriptions represent courses offered recently. Not all courses are offered every semester, and it is important to check with Olin Business School prior to scheduling classes to determine course availability for any given semester. Olin Business School reserves the right to make changes in the course offerings or descriptions.