

New Courses for Fall 2015



Globalization, Open Innovation, Crowd Sourcing (3 Credits)

Count towards: Information Systems Concentrations

Pre-requisite: MGMT-UB 1 (Management & Organizations), Junior Standing

This course explores new ways in which organizations become innovative and efficient in today's economy by tapping into expertise that exists outside firm's boundaries and its major geographical locations. While neither globalization of work nor involving other firms or customers into a firm's innovation processes is new per se, there is unprecedented growth of these practices in modern organizations enabled by new technological platforms. Yet, the practices of opening up the enterprise through offshoring, outsourcing, and crowdsourcing knowledge work come with some costs and risks of failure. In this course, we will discuss how to evaluate risks and benefits of such practices by doing qualitative analysis of cases, discussing strategic theories, learning decision making tools, and engaging in real-time crowdsourcing projects. Specific topics covered include: 1) strategic considerations of whether an activity should stay within or outside the firm boundaries; 2) strategic evaluation of geographical locations for a particular type of knowledge work; 3) service or platform provider competencies: how to grow them and how to evaluate them; 4) when and how to partner for product innovation; 5) how to organize a crowd of customers or experts; 6) contracting and governance; 7) enabling innovation in distributed teams. This course is designed to give students a truly multidisciplinary perspective on these issues drawing on theories and practices from international business, strategy, and innovation management.



Introduction to Programming and Data Science (3 Credits)

Count towards: Information Systems Concentrations, BEMT Minors

This course is the recommended starting point for undergraduate students who 1) are interested in jobs in the rapidly growing fields of data science and data analytics or 2) who are interested in acquiring the technical and data analysis skills that are becoming increasingly relevant in other disciplines such as finance and marketing. The course does not have any prerequisites. It will provide an introduction to programming (using Python) and cover related topics related to the collection, storage, organization, management, and analysis of large volumes of data, both structured (record-based) and unstructured (such as text).



Mobile for Managers (2 Credits)

Count towards: Marketing Concentrations, BEMT Minors

Pre-requisite: MKTG-UB 1 (Intro to Marketing)

This course is designed to provide managers in the technology industry with a framework for understanding and succeeding in the burgeoning mobile ecosystem. The course covers trends in the industry and foundational pieces, including but not limited to: mobile design and development, B2B/B2C applications, business models, data collection/privacy. Students will learn the basic concepts, terms and principles that apply to the mobile industries. At the end of the course they will be able to analyze the activities of the leading mobile companies and applications through articles, case studies, and lectures. The course will help them become familiar with key strategic issues across all the sectors of the mobile industry. Finally, they will develop an understanding and appreciation of the challenges involved in managing mobile products.



Undergraduate College

New Courses for Fall 2015



Portfolio Management (3 Credits)

Count towards: Finance Concentrations

Pre-requisite: FINC-UB 2 (Foundations of Finance)

The art and science of making decisions about investment mix and policy, matching investments to objectives, asset allocation for individuals and institutions, and balancing risk against performance. (Investopedia) There has been a proliferation of new products and strategies in the asset management space in recent years, e.g., smart beta, alternative beta, fundamental indexing, low volatility, and leveraged and inverse ETFs. This course applies portfolio theory to understand and evaluate these products and strategies in the context of the empirical evidence about return patterns across assets (i.e., the factors such as value/growth, momentum, and carry that drive returns) in multiple markets/asset classes (e.g., US and international equities and bonds, currencies, and commodities)



Advanced Futures and Options (3 Credits)

<u>Count towards</u>: Advanced Finance Elective and Advanced Mathematical Methods Minor <u>Pre-requisite</u>: FINC-UB 43 (Futures of Options)

This course consists of three parts. The first section of the course is a detailed examination of the pricing and hedging of option contracts, with particular emphasis on the application of these concepts to the design of derivatives instruments and trading strategies. The second section of the course is designed to provide a broad exposure to the subject of interest rate derivative products, both swaps and options. The last section of the course deals with recent innovations in the derivatives markets such as exotic options, credit derivatives and catastrophe derivatives. In the first section of the course, the discussion of trading strategies is in the context of the management of the risk of a derivatives book. The topics covered in the second part of the course include the relationship of swaps to other fixed income contracts such as futures contracts and forward rate agreements, valuation and hedging of swaps, building the yield curve, and valuation and hedging of interest rate options, with particular reference to caps, floors and swaptions, and modeling the term structure of interest rates. The third section of the course deals with non-standard option contracts such as exotic options and options on new underlying instruments such as credit, weather and insurance derivatives.



Financial Analysis in Entertainment/Media Technology (2 Credits)

Count towards: Finance Concentrations, BEMT Minors

Pre-requisite: FINC-UB 7 (Corporate Finance)

This course is designed for those interested in careers in investment banking, consulting, or business development. It is designed to reinforce and develop the concepts learned in the corporate finance course by applying them to entertainment, media and technology (EMT) companies. Students will explore the distinctive characteristics of EMT companies/sector while practicing and building on fundamental analytical skills. Similar skills are critical to analytical needs in investment banking, equity and fixed income valuation, and corporate development. Students will analyze recent and ongoing transactions to make the material more topical and relevant.



Emerging Innovations in the Energy Industry (3 Credits)

<u>Count towards</u>: Public Policy and Management, Environmental Studies, and Social Entrepreneurship Minors

Topics covered:

- •Innovations in energy generation, distribution and storage
- •Strategies used by companies operating in low-carbon businesses
- Management and marketing of energy investments
- Project work with start ups operating in NYC-ACRE