FINANCE (FINC-UB)

FINC-UB 2 Foundations of Finance (4 Credits)
Typically offered Fall, Spring, and Summer terms
A rigorous course that develops the basic concepts and tools of modern finance. It explores in detail basic concepts of return and risk with a view to understanding how financial markets work and how different kinds of financial instruments are valued. These instruments, including equities, fixed income securities, options, and other derivative securities, become vehicles for exploring various financial markets and the utilization of these markets by managers in different kinds of financial institutions to enhance return and manage risk.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 7 Corporate Finance (3 Credits)
Typically offered occasionally
This course helps students develop an analytical framework for understanding how organizations make investment and financing decisions. Students also learn the theory and practice of various valuation techniques. There is an emphasis on understanding the theory and its applications to the real world as well as appreciating the limitations of the tools in practical settings. Specific topics include capital budgeting, investment decision rules, discounted cash flow valuation, real options, cost of capital, capital structure, dividend policy, and valuation methods such as WACC and APV.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 8 Advanced Corp Finance (3 Credits)
Typically offered occasionally
The purpose of this course is to familiarize students with the core concepts and theory underlying much of the general understanding of corporate finance and its impact on corporate valuation. The first part of the course consists of lectures on corporate finance theory which explore the links between a firm’s financing decisions, its investment decisions, and corporate structure through the lenses of taxes, information asymmetries, and the conflicts of interest between its various stakeholders. The second part of the course consists of case studies which illustrate the relevance of the theoretical framework for (understanding and designing) real-world corporate financial strategy and for (understanding and dealing with) strategic issues in corporate valuation. The course material is organized around corporate finance “concepts” (debt overhang, risk-shifting, managerial agency, adverse selection, etc.) and “applications” (bankruptcy and restructuring, IPOs and valuation, M&A, corporate governance, etc.).
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 13 Financial History of the US: From the Panic of 1907 to Silicon Valley Bank (3 Credits)
The goal of this course is for students to understand how history, i.e., people and events of the past, have shaped the present-day financial system in the United States, which encompasses its markets, institutions, and regulatory frameworks.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 15 Alternative Investments I: Principles & Strategies (3 Credits)
Typically offered occasionally
This course provides both a theoretical and practical look into the world of managing alternative investments, in particular, hedge funds. The course is organized from the perspective of an asset manager (e.g. pension fund, endowment, family office, fund of funds, etc.) having to choose amongst a cross-section of hedge funds. Students are introduced to the dimensions and institutional features of the hedge fund sector, and then proceed to study how various classic hedge fund strategies are executed, including advanced quantitative strategies. Performance evaluation, risk management, and due diligence in the formation and execution of strategies are also covered.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 22 Risk Management in Financial Institutions (3 Credits)
Typically offered occasionally
This course examines the management of risks in a wide range of financial activities, with a particular focus on market risk, credit risk, and liquidity risk. It uses quantitative models to estimate credit losses, economic capital and value at risk, and to perform stress tests and scenario analysis. The course also analyzes the consequences of technological change, globalization, monetary policy, and the entry of new types of institutions into existing financial markets. It emphasizes the importance of systemic risk, moral hazard, and new regulations in light of the recent financial crisis.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 23 Emerging Markets Finance (3 Credits)
Typically offered occasionally
The perspective in this course is that of an investment manager specializing in emerging and frontier markets and responsible for optimizing performance of investment portfolios at a bank, pension, endowment, or mutual fund. Investment opportunities in emerging financial markets around the world are examined in the context of performance optimization and global risk diversification against a typical backdrop of high per capita income growth, low leverage, favorable demographics, accelerating urbanization, and improving transparency at both the macro-policy and corporate governance levels. Challenges considered include political risk, currency risk, asymmetric information, speculative pressure, and market manipulation. Liquidity limitations, legal constraints, and varying accounting rules and standards also pose challenges to emerging market investors. These unique challenges also provide unique opportunities not available in developed markets. Asset classes range from equities, currencies, bonds, and derivatives to real estate and private equity. Class discussion and reading focus on both the theoretical background as well as practical knowledge necessary to successfully navigate the opportunities and pitfalls of emerging and frontier market investing. The course also includes a select group of guest speakers who share their firsthand knowledge and accounts of investing and operating in emerging markets.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No
FINC-UB 26 Debt Instruments and Markets (3 Credits)
Typically offered occasionally
This course describes important fixed income securities and markets and develops tools for valuing debt instruments and managing interest rate risk. The course covers traditional bond pricing, term structure, and interest rate risk concepts. It also covers the analytical and institutional aspects of fixed income derivatives, such as interest rate swaps, forwards, futures, and options, as well as bonds with embedded options and mortgage-backed securities. Topics also include credit risk, bond portfolio management, financial engineering, and international fixed income. The study of fixed income is quantitative and technical by nature.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 29 Behavioral Finance (3 Credits)
Typically offered occasionally
This course uses human psychology and market frictions to shed light on asset returns, corporate finance patterns, and various Wall Street institutional practices. It starts with motivating evidence of return predictability in stock, bond, foreign exchange, and other markets. The course then proceeds to themes including the role of arbitrageurs in financial markets, the psychological and judgmental biases of average investors, and the financing patterns (such as capital structure and dividend policies) of firms that raise capital in inefficient securities markets and/or are led by irrational managers.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 30 Int’l Financial Mgmt (3 Credits)
Typically offered occasionally
This course examines the operation of international currency exchange and capital markets and applies financial management principles to the financial decisions of multinational corporations. It addresses such topics as economic determinants of exchange rates, currency market efficiency, exchange rate forecasting, techniques for measuring and managing exposure to exchange and political risk and financing alternatives and capital budgeting decisions of multinational corporations. Readings and case studies are employed.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 32 Private Equity Finance (3 Credits)
This course will use the case method to provide a comprehensive overview of private equity finance. The objective of this course is to survey the private equity industry and to provide an understanding of the origination, valuation, execution, monitoring, and realization of private equity transactions and of the process of investing in private equity funds. The course will include a series of lectures designed to teach specific skills and concepts used in the practice of private equity and in the M&A business more broadly and case discussions through which those skills and concepts will be illustrated and utilized.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 35 Real Estate Investment Strategies (3 Credits)
Typically offered occasionally
The course is designed students with a strong interest in real estate capital markets. Its target audience is students specializing in Real Estate, for whom this is a capstone course, but is also open to finance-oriented students who wish to gain an in-depth understanding of real estate investment analysis. Topics covered will span the real estate equity and debt markets, both public and private. The bulk of the course focuses on commercial real estate, but we will spend some time studying the housing markets. There are three major sections in the course: Structured finance and the CMBS market, REITs and Publicly-Traded Real Estate, the Private Real Estate Market. The class will contain a mixture of standard lectures, guest speakers, and case discussions. It will meet once per week for three hours to accommodate the relatively high number of outside speakers and cases in the course.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 38 Real Estate Capital Mkts (3 Credits)
Typically offered occasionally
This course introduces students to real estate securitization from both an equity and debt perspective. It analyzes alternative types of mortgage securitization vehicles including real estate investment trusts (REITs), commingled real estate funds (CREFs), real estate limited partnerships (RELPs), master limited partnerships (MLPs), and real estate swaps. The course also introduces students to mortgage-backed securities (MBSs) as an example of real estate debt securitization, and explores differences in their cash flows, prepayment, and default probabilities. It discusses the dynamics of mortgage prepayments and pricing the embedded call option in a mortgage, followed by real-world applications. Students explore such mortgage derivatives as mortgage pass-throughs, interest-only and principal-only strips, floaters and inverse floaters, and various types of collateralized mortgage obligations such as planned amortization classes.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 39 Real Estate Primary Markets (3 Credits)
Typically offered occasionally
This course covers the theory and measurement of return and risk on real estate financial decisions. Topics include loan valuation theory, determination of future costs, discounting procedures for cash flows of income-producing properties, and utilization of negative cash flows. Finance theory is applied to real estate decisions regarding land subdivision, property development, lender strategies, and the role of government agencies in real estate.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No
FINC-UB 41 Equity Valuation (3 Credits)

Typically offered occasionally

This course covers the valuation of stocks and businesses. Real life valuations of companies are an inherent part of the content. By the end of the course, students should be able to: (1) apply discounted cash flow analysis to find the intrinsic value of an asset; (2) define, describe, analyze, and apply any multiple (PE, Value/EBITDA, Price/Book Value, etc.) to find the relative value of an asset; (3) value any publicly traded firm, small or large, domestic or foreign, healthy or troubled; (4) value any private business for owners or investors (private equity, venture capital, IPO); and (5) separate fact from fiction, sense from nonsense, and real analysis from sales pitch in equity research reports, valuations, and general discourse.

Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 43 Derivatives (3 Credits)

Typically offered occasionally

This course covers the theoretical and practical aspects of futures, options, and other derivative instruments, which have become some of the most important tools of modern finance. While the primary focus is on financial derivatives, contracts based on commodities, credit risk, and other nonfinancial variables are also covered. Topics include market institutions and trading practices, valuation models, hedging, and other risk management techniques. The course requires relatively extensive use of quantitative methods and theoretical reasoning.

Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 44 Portfolio Management (3 Credits)

Typically offered occasionally

Portfolio management: 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). Key questions include: • What factors drive asset returns? Is it risk or mispricing? • Can this structure of returns be used to construct better portfolios and products? • How should the performance of existing products be evaluated given the empirical evidence? The basic theoretical framework is standard portfolio theory, as developed in Foundations of Finance, and its extensions, and the course will rely heavily on Excel modeling using real world data.

Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 45 The Financial Service Industry (3 Credits)

Typically offered occasionally

This course provides a broad overview of investment banking and of the forces that are continuing to change it worldwide. It focuses on three big questions: (1) How are things done in this business? (2) Why are they done that way? (3) How are they likely to be done in the future? The approach is to examine each of the principal businesses in which various financial service firms have been involved, including raising capital, financial advisory, broker/dealer positions, trading, investing the firm's own capital, managing the assets of others, both institutions and individuals, and risk management. Throughout, there are a number of overarching themes. Among these are the interplay of regulation, politics, globalization, and technology; the emergence of private equity funds and hedge funds as both critical clients and potential competitors for the major investment banks; the search for new, high-margin products, and whether that process has reached its limits; and the changing relationships among the different groups within the financial service company.

Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 46 Activist Investing (2 Credits)

This course will explore the world of activist investing. The first half will explore significant historical cases and the second half will have you working on live campaigns, each of which contains a unique set of circumstances and lessons to be learned. We will look through the lens of the investors in each campaign, identifying the opportunity that they saw and how they went about enacting change. Throughout the term, we will focus on the key aspects of activist investing including: identifying different reasons for underperformance, the most common requests of activist investors, and the tactics used to achieve their goals.

Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 49 Principles of Securities Trading (3 Credits)

Typically offered occasionally

Most finance courses focus on how securities are defined, valued and used. This course is about how securities are traded: the design, operation and regulation of trading processes, mechanisms and protocols. Today’s markets for stocks, bonds, and derivatives span a wide range in sophistication and complexity. For some securities, the market has evolved to an integrated network that offers very high levels of access and transparency. At the other extreme we have markets that operate as small dealer networks sustained by reputation and relationship. Some mechanisms are new (the open electronic limit order book)# some are as old as antiquity (the single price call auction). We have a general sense that all markets are heading toward some sort of electronic future, but the speed of progress and convergence varies widely. Our markets are infused with tensions between efficiency and fairness, competition and regulation, consolidation and fragmentation, speed and stability, and so on. The course is based on a realistic picture of the trading process, so we go into a fair amount of institutional detail, as well as some law and market regulation. The intellectual framework for the material comes from mainstream economics, financial economics, and the newer subfield of financial economics known as market microstructure.

Grading: Ugrd Stern Graded
Repeatable for additional credit: No
FINC-UB 50 Mergers, Acquisitions, & Restructuring (2 Credits)
Typically offered occasionally
This course presents the theories and empirical evidence on mergers, acquisitions, and restructuring, and analyzes the effects of various policy options on the stock values of acquirer and target companies. Findings about the reaction of stock prices to information on control transactions are used to analyze the effects of various policy options in such transactions. Topics related to M&A include evaluating acquisition targets, methods of payment in acquisitions, acquisition strategies, the use of leverage in acquisitions and the effects of acquisitions on bond values, major legal issues, case law, and defensive measures against hostile acquisitions. The course combines lecture material, case analysis, quantitative and qualitative analysis, and discussions of relevant news of such transactions. There is an emphasis on fundamental concepts of valuation and other areas of corporate finance related to M&As.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 61 Entrepreneurial Finance (3 Credits)
Typically offered occasionally
This course seeks to provide an understanding of the financial and transactional skills required to fund new businesses and mature firms. The course integrates both an academic and practitioner view of the challenges facing entrepreneurs and investors involved in business start-up, venture capital, and private equity investment activities. The course presents frameworks and techniques needed to evaluate high-risk opportunities and structure appropriate investment transactions.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 62 Applications in Entrepreneurial Finance: Fintech (3 Credits)
Typically offered occasionally
This course examines the lifecycle of high-growth new ventures (i.e. startups), with a focus on how they are funded. We will follow a successful startup’s path from founding through the stages of new venture finance. These include developing a business plan and its financials, the core skills of valuation, the venture capital industry, and how entrepreneurs and investors realize returns. Through examples of specific companies and technologies, we will also learn about the emerging landscape of financial technology (fintech) startups. We will consider the following subsectors, where startups are either seeking to displace incumbents or sell them their services: personal finance, blockchain, equity crowdfunding, lending (peer-to-peer and AI-augmented), payments, insurance, institutional investment, and money transfer.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 66 Hedge Fund Strategies (3 Credits)
Typically offered occasionally
This course aims to provide an in-depth understanding of the strategies used by hedge funds, employing a hands-on approach based on case studies and real data. The hedge fund industry has grown rapidly over the last decade aided in part by the private nature of funds and light regulation that has enabled managers to employ strategies not available to traditional fund managers. The course examines critical aspects of hedge fund investment styles including the trading mechanism, risk-return profiles of investment styles, trading costs, risk management and performance measurement. Strategies covered include event driven strategies, equity, debt, FX, cross-market strategies, global macro and shareholder activism. Distinguished guest speakers will be invited to provide a real-life perspective and to discuss key issues.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 68 Financial Analysis in Telecom, Media & Technology (2 Credits)
Typically offered occasionally
This course is designed for students who intend to pursue careers across the investment banking industry as well as those exploring careers in corporate strategy and management. Areas covered include equity and debt analysis, mergers and acquisitions, and corporate strategy. While the core of the course is corporate finance, the issues encompass strategy, marketing, and economics aspects. Students will learn the unique characteristics of telecom, media and technology companies/industries while building on fundamental analytical skills by examining a series of landmark and potential corporate transactions in telecom, media & technology industries to understand how TMT companies respond to secular changes and transform their business models in the midst of evolving ecosystems. Cases discussed/analyzed include: Instagram, ActivisionBlizzard, Twitch, Apple, Alphabet, Disney, FOX, AT&T, DirecTV and Time Warner.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 75 Managing Climate, Cyber, Geopolitical, and Financial Risk (3 Credits)
Businesses and governments now face a growing and immediate array of nonfinancial risks, including climate-related, cyber and operational, and geopolitical risks. Precisely because these critical risks are hard to measure and analyze, firms are putting new resources – people and money – to work to anticipate, manage and mitigate them. To address cybersecurity risks, for example, JP Morgan alone has 3000 employees and spends $600 million annually. Firms are only starting to grapple with existential climate-related risks. And startups are mushrooming to provide assessments to businesses. This course will study these risks alongside financial risks. It will outline frameworks for measuring, assessing and analyzing them, and for actions needed to meet them. We will examine case studies of climate, cyber and geopolitical risks, including from current events. Finally, we will study whether and how the information in financial markets can both inform the assessment of these risks and potentially provide tools to transfer, insure against or hedge them.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No
FINC-UB 77 Climate Finance: An Economic and Financial Approach to Climate Change (3 Credits)
Climate change presents one of the central challenges of our generation, with a wide range of possible effects on financial markets and the broader economy. This class: (i) Thinks about the effect of climate change on the overall economy; (ii) Studies the risks and opportunities that climate change hold for firms and financial institutions (distinguishing between a variety of types of risk, including transition risk and regulatory risk); (iii) Discusses how financial markets can help transfer and hedge climate risk; (iv) Explores the economic and financial foundations of potential climate regulation; (v) Analyzes how climate risk interacts with other risks, such as the risk of future pandemics.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 82 Credit Risk and Bankruptcy (3 Credits)
The objective of the course is to provide an introduction as well as an in-depth understanding of single-name derivative products, primarily the single-name credit default swaps (CDS), as also index products, with a focus on sovereign CDS and index products. We will apply the tools by studying signs of market stress during the COVID-19 crisis and how Fed interventions alleviated the market turmoil in that period. In particular, the liquidity in the markets for government bonds will become important to understand as well. Along the way, we will look at methods to quantify the systemic risk of the financial sector and regulatory as well as market-based stress-testing of financial firms. Finally, we will also pay some attention to the ongoing concerns around zombie lending to corporates by bond markets given the central bank backstop post COVID.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 86 Chinese Financial Markets (3 Credits)
Typically offered occasionally
This course introduces the institutions, instruments, and empirical regularities of Chinese financial markets and the role these markets play in the broader Chinese economy. The goal of the course is to provide students with a comprehensive understanding of Chinese financial markets. It focuses on current issues and debates about Chinese financial markets, including the Chinese banking system, RMB exchange rates, Chinese stock markets and bond markets, mutual funds and hedge fund industry, Chinese derivative markets and other important topics. The similarities and differences between Chinese financial markets and more developed markets will be highlighted.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 87 Global Banking & Capital Markets (3 Credits)
Typically offered occasionally
Wholesale banking, which encompasses capital raising and investing for governments, corporations, and institutional investors, has become one of the most important industries in the global economy. This industry is centered in capital markets which today represent more than $220 trillion of market value, most of which has been raised and is traded outside the United States. The top ten global wholesale banks, which account for 75% of all new issue activity, are comprised of five US and five European banks. All of these banks look to business opportunities and market developments beyond their home countries for their future development. For example, the Euromarket for bonds, stocks and derivatives now represents about half of the new issue value of all global securities, and the prospects of higher growth rates and market reforms in China, India, Latin America, Eastern Europe and Southeast Asia have caused banks to allocate considerable resources to these "emerging markets." Meanwhile, the future of the global banking industry has been confused and complicated by the consequences and aftermath of the Global Financial Crisis of 2007-2008, the most economically damaging since the 1930s. The ability of banks to compete in the new market environment of the post-crisis era is still being shaped by important regulatory changes and political events in the US, Europe and Asia. This course addresses all of these issues for students interested in global financial services and markets. It addresses differences between investment banking practices and competition in the US and the other market areas, it focuses on how international regulatory and other changes since the crisis will affect the ability of banks to compete effectively on the global stage, and how these factors will affect their business strategies and ability to satisfy shareholders and other investors.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 9002 Foundations of Finance (4 Credits)
This is a rigorous course developing the basic concepts and tools of modern finance. It explores in detail basic concepts of return and risk with a view to understanding how financial markets work and how different kinds of financial instruments are valued. These instruments, including equities, fixed income securities, options, and other derivative securities become vehicles for exploring various financial markets and the utilization of these markets by managers in different kinds of financial institutions to enhance return and manage risk.
Grading: Ugrd Stern Graded
Repeatable for additional credit: Yes
FINC-UB 9007  Corporate Finance  (3 Credits)
The class focuses on the nature of financial management from a number
of perspectives including the national, the corporate and the individual,
but particularly the corporate. You will become familiar with the financial
system, including that relating to banking, though there will be little
overlap with courses that deal with the functioning of financial markets.
The importance of behavioural finance will also be stressed during the
course.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 9009  Global Growth & Local Discontent  (2 Credits)
The past three decades have brought unprecedented increases in global
living standards. In the mid-1980s, countries then known as "Third World,"
were mired in low growth, high debt, and runaway inflation, while the
developed world seemed to hold the keys to prosperity. In a remarkable
turnaround, a billion people have been lifted from poverty in those same
countries—the now-much-heralded "Emerging Markets" that produce
more than half of global output and almost three quarters of global
growth. Indeed, when advanced economies plunged into recession
following the Global Financial Crisis, it was not only quantitative easing
by the Federal Reserve and European Central Bank that stabilized them in
2010, but also the strong economic performance of emerging economies
that year. Following the crisis there are new challenges, as developed-
world leaders assert that emerging economies’ success is responsible
for income inequality and other economic ills in rich countries. Taking the
historic fall of the Berlin wall in 1989 as the proximate impetus, we will
explore the power of economic reforms to unleash sustainable, inclusive,
and positive-sum global growth.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 9022  Risk Management in Financial Institutions  (3 Credits)
Typically offered not typically offered
This course examines the management of risks in a wide range of
financial activities, with a particular focus on market risk, credit risk,
and liquidity risk. It uses quantitative models to estimate credit losses,
economic capital and value at risk, and to perform stress tests and
scenario analysis. The course also analyzes the consequences of
technological change, globalization, monetary policy, and the entry of new
types of institutions into existing financial markets. It emphasizes the
importance of systemic risk, moral hazard, and new regulations in light of
the recent financial crisis.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No

FINC-UB 9029  Behavioral Finance  (3 Credits)
This course uses human psychology and market frictions to shed light
on asset returns, corporate finance patterns, and various Wall Street
institutional practices. It starts with motivating evidence of return
predictability in stock, bond, foreign exchange, and other markets. The
course then proceeds to themes including the role of arbitrageurs in
financial markets, the psychological and judgmental biases of average
investors, and the financing patterns (such as capital structure and
dividend policies) of firms that raise capital in inefficient securities
markets and/or are led by irrational managers.
Grading: Ugrd Stern Graded
Repeatable for additional credit: No