

Global Master of Finance Dual Degree Master in Finance and Banking UPF Course Descriptions

Olin Foundation Courses

FIN B62 510. Introduction to Finance

The main topics to be covered in this course are (1) principles of investments, (2) financial analysis of corporate projects, (3) cost of capital, and (4) capital structure and financing policies. The objective of the company is assumed to be shareholder value maximization. Shareholder value is created by earning more than the cost of capital. The cost of capital is an opportunity cost – what investors could expect to earn on comparable investments in the financial markets. To understand the cost of capital, we need to understand the viewpoint of investors. Furthermore, to understand whether a project earns more than the cost of capital, we need to know how to estimate and discount project cash flows. So, the first three topics are closely connected. The main question in the fourth topic is whether we can create shareholder value through the financial structure of the firm. For example, we will ask whether we can lower the cost of capital by financing with debt instead of equity, or vice versa. 1.5 Credits.

ACCT B60 560. Introduction to Accounting

In this course, we will study the three fundamental financial accounting issues, including (1) recognition, (2) measurement/valuation, and (3) classification/disclosure and consider how business transactions are reflected on the financial statements using generally accepted accounting principles (GAAP). We will cover the four primary financial statements (balance sheet, income statement, statement of stockholders' equity, and statement of cash flows), the supporting footnotes to these statements, and several reports (annual reports, proxy statements, and press releases). The course incorporates both a preparer's perspective (i.e., GAAP requirements for recording and presenting financial information) and a user's perspective (i.e., how an investor or analyst can interpret and use financial statement information). 1.5 Credits.

Olin Summer I

FIN B62 532 Investment Theory

A course in the theory of risk and return in capital markets. Topics covered correspond to those which are covered in the CFA level 1 exam. We will cover the CAPM and APT models of asset pricing and will discuss various measures of mutual fund performance evaluation which arise from these models. We will discuss interest rate determination and also introduce the concepts of price and reinvestment risk in fixed income securities. 1.5 Credits.

FIN B62 534 Advanced Corporate Finance I – Valuation

This course considers a broad range of issues faced by corporate financial managers with respect to the valuation of projects, divisions, and entire companies. The prime focus will be on assessing the profitability of different business alternatives in a forward-looking sense. It will explicitly consider the impact of financing decisions on the valuation of business alternatives. Other topics covered include an examination of EVA as both a valuation and performance measurement tool, and a brief introduction to Real Options as an alternative to discounted cash flow analysis. The course is designed to be "hands-on", and will heavily focus on direct applications of the theory and the individual development of spreadsheet modeling skills. Students who successfully complete the course should possess a set of cutting-edge valuation skills. Students may not take both this class and FIN 523 for credit. 1.5 Credits.

FIN B62 524 Options and Futures

Focuses on futures with an introduction to options. Discusses forward and futures pricing, and the use of various futures contracts to hedge commodity price risk, interest risk, currency risk, stock portfolio risk, and other risk exposures. 1.5 Credits.

FIN B62 524B Derivative Securities

Provides an in-depth analysis of valuation and trading strategies for options and other derivative securities which have applications across areas of finance such as hedging, swaps, convertible claims, mortgage payments, index arbitrage, insurance, capital budgeting and corporate decision making, and are responsible for many new innovations and developments of the financial markets. Students may not receive credit for both this course and FIN 5460. Prerequisites: FIN 524. 1.5 Credits.

UPF Fall I

Financial Econometrics

The course begins with basic concepts from time series analysis determining the tendencies of financial data over time such as stationarity and unit roots. These concepts are paramount for developing suitable techniques for modeling different types of financial data. The module will cover dynamic regressions for stationary data and cointegration techniques for nonstationary data. These methods will be complemented with a thorough study of the volatility process under different paradigms. Multivariate methods such as Vector Autoregressive (VAR) processes for handling systems of variables will be discussed. To complete the multivariate framework the module will also focus on panel data. Risk management methods will also have some attention in the course. Each topic will be illustrated by computer sessions using STATA and real financial data. 4 Credits.

Financial Accounting and Analysis

Financial accounting and analysis deals with the public information that companies produce about their financial and economic activities. The course will first present the different documents that comprise the financial statements of a company (the statement of financial situation, the income statement, the cash flow statement, the statement of changes in equity and the notes). Each of the four main financial statements will then receive separate attention: we will place the emphasis on understanding the information contained in the specific statement and on analyzing how that information helps to obtain an accurate assessment of the financial and economic situation of the company. Our discussion will always put the analysis of the financial statements in the context of the financial management of the firm: the information in the financial statements is the starting point for the analysis of a firm's investment and financing decisions and, as a consequence, for firm valuation.

Finally, the course will include a few sessions on the specificities of the banking sector: the structure of the financial statements of a bank is very different from that of a "typical industrial firm. We will try to flesh out the main differences and to review the topics of highest importance for a correct analysis of a bank's financial information. 4 Credits.

Investments

Investments deals with the main challenge faced by the financial manager or the investor: the valuation of assets and productive projects and the subsequent allocation of resources to those investment choices.

The main subject of the course is, therefore, the analysis of investment decisions. We will use concepts of asset pricing under certainty and uncertainty, and will apply investment decisions analysis for the investor. Emphasis will be placed on the calculation of the cash flows from the assets, the choice of the cost of capital and, from a more pure finance standpoint, the final selection of the investment portfolio. In more complex settings (making decisions contingent to other future decisions) more advanced analysis techniques will be introduced. In this context, this course will place a good deal of attention to asset allocation and portfolio management techniques. 4 Credits.

Financial Management

The primary objective of the course is to examine how corporations are financed in the long term, how they optimize their payout policy and how they manage their short term financial needs. 4 Credits.

Organizational Behavior

We will discuss a set of core theoretical concepts that form the foundation of social and cognitive psychology as scientific fields. We will illustrate many of the concepts through in class experiments. You will have a chance to put the theory into practice through assignments, case discussions and project assignments. I will ask you to reflect on how scientific knowledge discussed in class can be put into practice in your own life within and outside organizations, to help you achieve your development goals. 4 Credits.

Marketing Management

Marketing is a way of thinking about business. The success of an organization depends on the success of its marketing activities. The role of Marketing management in organization is: to identify and measure the needs and wants of consumers, to determine the targets the business can serve, to decide on the appropriate products and services to serve these markets and to determine the optimal pricing, communication and distribution strategies to be implemented. 4 Credits.

UPF Winter

Financial Markets and Institutions

This course is devoted to the study of the financial system, the collection of markets institutions, regulations, and techniques aimed at reallocating funds across economic agents and through which securities (stocks, bonds, etc.) are traded, interest rates are determined, and financial services are delivered to meet investment and financing needs. 4 Credits.

Macroeconomics and International Finance

This course is designed to provide students with a structured understanding of the broad economic and financial movements in the global economy. Topics covered will include measures of economic performance, interest rates, inflation rates, unemployment, consumption and saving decisions, investment, the financial markets, the business cycle, monetary and fiscal policy, international trade, and investment, exchange rates, international capital flows, and international finance. By the end of the course, students will be able to evaluate and discuss the economic environment in which business and financial decisions have to be made. 4 Credits.

Financial Institutions Management

The content of this course focuses on the management and regulation of commercial banks and other depository institutions. Developing a risk approach, it insists on commercial banking strategies in their different risk dimensions. Particular emphasis will be given to banking regulation and supervision as well as credit risk and liquidity risk measurement and management. The institutional dimension will also be considered, as part of the banks' environment. It will also be discussed how the banking crisis of 2007 has dramatically affected banks. 4 Credits.

Corporate Valuation

This course shall develop and apply the tools used to evaluate the performance and to assess the value of corporations. The course covers and puts at work the valuation approaches for enterprise valuation. You will learn to discuss whether a firm is creating value for shareholders. An important aspect of this course will be to bridge financial theory and practice with valuation and capital structure analysis in the context of real world implications. 4 Credits.

UPF Spring

Derivatives and Risk Management

The main objective of this course is to present an overview of the different potential applications of risk management of derivative assets. Other potential applications of derivatives that can also be covered are, for instance, a) speculation in markets (how to get money departing from a certain guess on future movements in markets) and b) design of (arbitrage) strategies to make riskless profits from observed arbitrage opportunities. 4 Credits.

Master Thesis

Your Master Thesis is a significant component of your learning and production activities at the BSM. Be in an academic paper, case study or business plan, your aim is to produce a document that meets high standards, and that you can be proud of. It should serve both your intellectual development and your professional career. 6 Credits.

Olin Summer II

FIN B62 532B Data Analysis for Investments

A course designed to teach students to use real data and real data sources to perform finance analysis. Students will learn how to understand various interest rates and calculate common risk measures for individual securities and portfolios. Students will also learn to use data sources such as the Bridge terminal, Bloomberg terminal, and DataStream and will use these tools to complete assignments. Students will learn to construct efficient frontiers, betas and adjusted betas, yield curves, and conditional volatility estimates. All students should leave the class being able to understand the sometimes confusing numbers which appear in the financial press, mutual fund prospective, and other sources. Prerequisite: FIN 532. 1.5 Credits.

FIN B62 534B Advanced Corporate Finance II – Financing

This course considers a broad range of issues faced by corporate financial managers with respect to the financing of investment opportunities. In this course, we turn to the right-hand side of the balance sheet as a direct follow up to the skills acquired in the Advanced Corporate Finance I - Valuation, a course that focused on the left-hand side of the balance sheet. The course is designed to be “hands-on”, and we will heavily focus on direct applications of the theory of financing to business practice. To that end, we will cover topics related to the valuation of bond and convertible securities, estimating the costs of financial distress, the reorganization of firms in financial distress, deriving an optimal capital structure, and the effects of management stock option grants on valuation. Students may not take both this course and FIN 523 for credit. Prerequisite: FIN 534. 1.5 Credits.

FIN 533. Real Option Valuation

This is an applied course in capital budgeting under uncertainty and flexibility. Traditional NPV analysis assumes that corporate investments are “now or never,” but most corporate projects have a great deal of flexibility in their timing, scale, etc. The objective here is to obtain an in-

depth understanding of these problems and the associated real option theory. The theoretical option pricing tools are binomial models and Monte Carlo simulations. The application topics cover all types of typical real options, cases of leasing, R&D, take-over, market expansion, growth values, dot-coms, staged investments, multiple project uncertainties, ranging from standard European and American options to compound and rainbow options. FIN 524, FIN 524B and FIN 534 are both highly recommended. 1.5 credits.

FIN B62 526 Risk Management

Risk management is an increasingly important, but often misunderstood, aspect of corporate financial policy. This course will analyze the whys and hows of financial risk management. The first half of the course will answer the question: Why should firms manage risk? The analysis will draw upon the theory of corporate finance to show how taxes, bankruptcy costs, and the costs of external finance can make risk management a value enhancing activity, and to understand the integration of risk management and corporate financial policy more generally. This underlying theory will be applied to the analysis of risk management issues in a variety of different industries and firms. The second half of the course will answer the question: How should firms manage risk? Risk management strategies employing exchange traded and over-the-counter derivatives such as futures, forwards, options, and swaps on fixed income securities, commodities, foreign currencies, and equities will be analyzed. If time permits, additional topics may be covered, potentially including credit risk, operational risk, settlement risk, and systemic risk. The course will include a rigorous analysis of the relevant theory, but will also emphasize application of this theory through classroom examples, homework problems, and cases. Prerequisites: FIN 524 and FIN 524B. 1.5 Credits.

FIN B62 523B Mergers and Acquisitions

The course will provide an in depth view of the theory and empirical regularities of various corporate control transactions. Specifically, we will discuss valuation of target firms, possible sources of value creation, various motives for mergers, tax consequences of mergers, legal issues in mergers, financing an acquisition, defensive tactics in hostile takeovers, going-private transactions and bidding behavior of acquirers. The method of instruction is a mix of lecture and case analysis. Prerequisite: FIN 534. 1.5 Credits.

FIN B62 500U Financial Markets – Regulation, Washington, D.C. Immersion Course

The regulation of United States financial markets will be examined in this course including key institutions and actors involved in regulation, such as the Federal Reserve, the Department of the Treasury, the Securities and Exchange Commission (SEC), Federal Deposit Insurance Corporation (FDIC), Commodities Futures Trading Commission (CFTC), the National Credit Union Administration (NCUA), Financial Industry Regulatory Authority (FINRA), as well as the United States Senate Committee on Finance and the House of Representatives Committee on Financial Services and regulatory lawyers. The course will emphasize the theory and practice of regulation, and this will be placed into the context of the contemporary financial system and challenges which exist to regulate it effectively, especially in the context of global financial crises. This course is offered in collaboration with Brookings Executive Education, part of the Brookings Institution, a nonprofit public policy research institution. 3 Credits.

FIN B62 500T Financial Markets – Institutions, New York Immersion Course

Major financial institutions and the markets in which they participate will be examined. Key financial institutions will include corporate and investment banking, hedge funds, private equity

firms, venture capital firms, fund management, and private wealth management. The markets covered include stocks and bonds, forex trading, and derivatives. Emphasis will be placed on the current trends and future prospects in each institutional area and the markets in which they participate, and how these are related to the global economy, especially in the context of global financial crises. 3 Credits.

UPF Fall I

Master Thesis

Your Master Thesis is a significant component of your learning and production activities at the BSM. Be in an academic paper, case study or business plan, your aim is to produce a document that meets high standards, and that you can be proud of. It should serve both your intellectual development and your professional career. 6 Credits.