

## **Department of Finance**



Professor Stephen J. Brown
Undergraduate Program Coordinator
for the Department of Finance



# Finanæ (C15)

he Department of Finance curriculum provides a working understanding of the financial decision-making process and offers insight into how financial markets function. It provides part of the necessary education for students seeking financial positions in business, in financial institutions, or in government or nonprofit institutions.

Courses in finance are divided into two broad categories. One category focuses on microfinance issues-corporation finance and investments. The second category focuses on macrofinance

issues—financial markets and the international financial system. All finance courses apply economic analysis, accounting, and quantitative methods to the financial problems encountered.

The Department of Finance faculty is the largest and one of the most distinguished finance faculty groups in the world. Members of our faculty are leaders in research and in textbook publication in their fields. We hold as our mission the great tradition started by the founders of New York University: to have a department that is recognized both nationally and internationally Anthony Saunders, Chairperson

Henry Kaufman Management Center, Room 9-190 44 West Fourth Street New York, NY 10012-1126 (212) 998-0300

Web site: www.stern.nyu.edu/fin

Richard M. Levich, Deputy Chairperson

Henry Kaufman Management Center, Room 9-91 (212) 998-0422

Stephen J. Brown, Undergraduate Program Coordinator

Henry Kaufman Management Center, Room 9-89 (212) 998-0306

as a leader in scholarship and to transmit that scholarship in a professional way to students and those in industry with whom we work.

## Program of Study

#### CAREER PREPARATION

Every type of private and public business organization needs people who have training in finance. This is obviously true for a large industrial corporation, a major bank, or an insurance company. But it turns out to be equally true for the owner of a small business with 25 employees, for a city manager with 250 employees, or for the business director of the Metropolitan Opera.

Students graduating from the Undergraduate College with a major in finance accept positions with banks, investment banking houses, government agencies, consulting firms, insurance firms, and large and small corporations. First careers range from credit analysis to securities analysis to product profitability analysis to apprentice floor traders on exchanges. In addition to being wellgrounded in finance, our students

must be prepared to work with multinational managers, marketing professionals, accountants, and others who depend on finance professionals to supply the funding currently needed and the analysis necessary to make profitable future decisions.

Being a part of a world-class university in the heart of New York City means that Stern students have opportunities not available at other universities. As part of their career preparation, all finance students are encouraged to take advantage of the many lectures and informal talks by leading business executives arranged by student clubs and the Dean's Office. In addition, many juniors and seniors will want to take advantage of the part-time jobs and internships offered by major financial institutions and others to Stern students.

#### FINANCE MAJOR REQUIREMENTS

Students who decide to major in finance must take four courses in finance in addition to the core course requirement Foundations of Financial Markets (C15.0002). The four courses include an integrated sequence of two required courses to ensure all finance majors have a common set of professional tools, plus two elective courses. These are the requirements:

C15.0007 Financial Management Corporate Finance Topics Plus two electives from among the courses listed as part of the "Advanced Courses in Finance" selections.

A student may elect to take a fifth course in finance. But more than five courses should not be taken as part of a student's program of study. It is important to remember that a Stern student is getting a B.S. degree in business administration, not a tradeschool diploma in finance. The Stern School and prospective employers both believe it is beneficial for every

Stern graduate to have broad exposure to the analytical styles of business management in all its dimensions.

In all our finance courses, the objectives are to provide (a) an indepth analytical and professional understanding of selected issues, (b) awareness that finance is a support activity that always involves cross-discipline communication and

Conversations of the West

Professional Skills Workshop

0

C40.0010

increasingly involves multinational considerations, and (c) an understanding that the Stern School has very high expectations for its finance students concerning their personal and professional standards for integrity and business, legal, and ethical behavior.

## Representative Program

Students majoring in finance should consult with an adviser in the Office of Undergraduate Advising and Student Services by the end of their sophomore year to ensure that course distribution requirements are being met and to declare formally the finance major. The Department of Finance undergraduate program coordinator is always available to advise on finance course selection or other matters finance students may wish to discuss.

Freshman Year	Points
V40.0100 Writing the Essay	4
V40.0115 and C40.0001	
The Advanced College Essay: Business and Its Publics	4
V31.0001 Economic Principles I	4
V31.0002	4
Economic Principles II V63.0017	4
Algebra and Calculus with Applications to Business	
and Economics	4
C20.0001 Computer-Based Systems	
for Management Support	4
General Education Electives	4

Creativity Workshop  Total	32
Total	32
Sophomore Year Po	ints
C10.0001	
Principles of Financial	
Accounting	4
C10.0002	
Principles of Managerial	2
Accounting	۵
C15.0002 Foundations of Financial	
Markets	4
C22.0103	1
Statistics for Business	
Control and Regression	
and Forecasting Models	6
General Education Electives	4
C65.0001	
Organizational Communication	4
C50.0001	
Management and Organizational	
Analysis	4
World Cultures	4
General Education Electives	2
Total	34

Junior Year	Points
C55.0001	
Introduction to Marketing	4
C60.0001	
Competitive Advantage	
from Operations	4
C15.0007	
Financial Management	3
C15.0008	
Corporate Finance Topics	3
C45.0011	
Global Business Environment	3
C45.0100	
International Study Project	3
C10.0006	
Legal Aspects of Business	4
Natural Science Requirement	4
General Education Electives	4
Total	32
Senior Year	Points
Integrative Business Experience	ce 4
C40.0012	
Professional Responsibility	
and Leadership	2
Department Core Electives	6
Free Electives	14
General Education Electives	4
Total	30

### Courses

#### CORE COURSE IN FINANCE

Foundations of Financial Markets C15.0002 4 points. Fall, spring, and summer.

Prerequisites: C22.0103, V31.0002 or V31.0004, C10.0001 (corequisite), and sophomore standing.

A rigorous course developing the basic concepts and tools of modern finance. Basic concepts of return and risk are explored in detail 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. The course includes a segment on the use and application of computer-based quantitative technology for financial modeling purposes.

INTEGRATED FINANCE SEQUENCE (For juniors and seniors only)

Financial Management

Financial Management C15.0007 *3 points. Fall, spring, and* 

Prerequisite: C15.0002. C15.0007 is a required course for finance majors. Introduces the student to selected problems and issues in financial management. Topics include capital budgeting—strategy and techniques associated with the analysis and

selection of capital projects, financial forecasting and financial planning, and an introduction to corporate finance that covers such topics as the cost of capital and issues associated with raising capital. Problem sets and case studies are integral parts of this course.

Corporate Finance Topics C15.0008 3 points. Fall, spring, and

Prerequisites: C15.0002, C15.0007. C15.0008 is a required course for finance majors.

The focus of this course is on major financial policy decisions of the corporation. Topics include corporate strategy in various economic settings, capital structure theory and policy, dividend theory and policy, and

advanced capital budgeting analysis. These analytical tools and theories are applied to topical issues in corporate finance ranging from mergers and acquisitions decisions to corporate bankruptcy to managerial control and compensation strategies. Case studies are a required part of this course.

### Money, Banking, and Financial Markets

C15.0021 3 points. Fall, spring, and summer.

Prerequisite: C15.0002. Transfer students who have taken V31.0231, Money and Banking, should not take C15.0021. V31.0231 may not be substituted for C15.0021.

Analyzes the operations of commercial banks and of nonbank financial institutions as acceptors of savings and as sources of money and credit. Examines supply and demand of loanable funds, structure of interest rates, process of deposit creation in commercial banks, and the role of the central bank. Also considers impact of monetary and other governmental policies on interest rates, on flows of funds in financial markets, and on aggregate spending and economic activity. Introduces the concept of total portfolio risk management of assets and liabilities for a financial institution.

## Policy Making in Financial Institutions

C15.0022 3 points. Prerequisites: C15.0002, C15.0007, and senior standing.

Examines the problems encountered in a wide range of activities of financial institutions, including assetliability management, security underwriting, fiduciary portfolio management, managing securities traders, and lending decisions. Some quantitative models are used to illustrate the types of aids necessary to manage modern financial institutions. Emphasizes factors relevant to strategic planning for financial institutions, including technological change, developments in the regulatory environment, international sources of competition, and entry by new types of institutions into existing financial markets.

#### **Topics in Emerging Financial Markets**

C15.0023 3 points. Fall or spring. Prerequisites: C15.0007 and senior standing.

The perspective in this course is that of an investment manager who may be responsible for investment portfolios at a bank, an insurance company, a pension or endowment fund or personal trust, or a mutual fund. Emerging financial markets around the world are examined. Problems considered include political risk, currency risk, excess speculation or market manipulation, differing accounting rules and standards, and performance measure comparison standards. Financial investments considered range from stocks to bonds to derivatives to real estate. Class discussion and reading focus on both the theoretical background and the practical knowledge necessary to deal effectively with the risks and opportunities that are a part of emerging financial markets.

#### **Debt Instruments**

C15.0026 3 points. Fall. Prerequisite: C15.0002.
Covers the valuation of fixed income securities and investment strategies utilizing them. Topics include the mathematics of bond valuation, immunization, history of interest rate structures, varieties of debt instruments, default, and country risk considerations. The role of financial futures and options on bond portfolio strategies is analyzed, as well as more traditional approaches to debt portfolio strategies.

#### International Financial Management

C45.0030 3 points. Fall, spring, and

Prerequisites: C15.0002 and either C45.0001 or C31.0336. Examines the operation of international currency exchange and capit

tional currency exchange and capital markets and applies financial management principles to the financial decisions of multinational corporations. Addresses such topics as exchange rate forecasting, hedging of exchange and political risk, and financing and capital budgeting by multinational corporations. Readings and case studies are employed.

## Topics in Working Capital Management

C15.0033 3 points. Prerequisites: C15.0007 and C15.0008.

Acquaints students with the modern techniques and practices of short-term corporate finance. The primary focus is on the management of the firm's liquid assets: cash and securities, accounts receivable, and inventories. The importance of good forecasting technique and comprehensive information systems is discussed. Cases and examples illustrate the variety of short-term financing sources and the complications on multinational working capital flows.

#### Real Estate Finance

C15.0039 3 points. Fall and spring. Prerequisites: C15.0002; corequisite C15.0007.

Covers 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.

#### **Investment Principles**

C15.0041 *3 points. Fall and spring. Prerequisite: C15.0002.* The first part of this course looks at personal financial management

strategies. Students develop prototype portfolios for individuals and families in different economic and demographic settings. Most of the course then focuses on the valuation of equity securities and investment strategies utilizing them. Topics include the mathematics of equity valuation, history of stock returns, and the many varieties of common stock risk. The course examines such issues as the role of mutual funds and pension funds, technical stock analysis, and ethical considerations in using information that impacts stock prices. Written reports and longer papers are required.

#### **Investment Topics**

C15.0042 3 points. Spring. Prerequisites: C15.0002, C15.0007, and senior standing.

Focuses on more advanced topics in investments. The course is somewhat quantitative in nature as the primary focus is on specialized types of securities. Topics may include securities trading practices, derivatives valuation models, hedging and risk management techniques, and bond valuation analysis. Other topics may include empirical studies of price behavior in security markets and portfolio management techniques in complex markets. Readings, problem sets, and short cases are employed.

#### **Futures and Options**

C15.0043 3 points. Fall and spring. Prerequisites: C15.0002, C15.0007, and senior standing. C31.0337, Economics of Forward, Futures, and Options Markets, cannot be substituted for C15.0043.

Covers derivatives and securities markets. The primary focus is on financial futures and options, but there are also references to the markets in commodity market instruments.

Topics include market institutions and trading practices, valuation models, and hedging and risk management techniques. The material is inherently more quantitative than in some other courses, and doing homework problems is an essential part of the work expected.

**Investment Banking** 

C15.0045 *3 points. Spring.* Prerequisites: C15.0002, C15.0007, and senior standing (limited enrollment). A broad overview of the role of investment banking in modern societies, this course explains which functions are performed and how these tasks are carried out in competitive and noncompetitive environments. Concepts discussed include the origination, syndication, and distribution of security issues. Other topics include the pricing of new issues and the management of issues in the after markets; the role of investment bankers in restructuring industry; financing governments; and facilitating saving and investment. Ethical issues investment bankers must face are considered.

#### Risk and Insurance

C15.0081 3 points. Fall and spring. Prerequisites: C15.0002 and C15.0007.

Provides the background for understanding the role of insurance and risk management as it applies to business and personal pursuits. The course includes a review of the major elements of life insurance, property and casualty insurance, and health insurance; the focus is on basic terminology, contract analysis, and investment implications. Risk issues from the view of both the insurance company and corporate user of insurance are considered. Illustrations apply to both corporate needs and an individual's estate planning and insurance.

**Distinguished Professor Seminar** C15.0095 *3 points.* 

Prerequisites: C15.0002, C15.0007, senior standing, and permission of the undergraduate program coordinator in finance. Offered every third semester.

This seminar explores the research interests and professional philosophy of one or more of the Department of Finance's distinguished professors. In the past, the course has focused on such issues as the rapidly changing technology of Wall Street, invest-

ment banking opportunities and disasters, and the growth of the international financial markets. Outside senior finance executives may be brought in as guest lecturers. Students are expected to participate in this tutorial seminar both by active class participation and by written essay work.

Independent Study in Finance C15.0094-0099 2 points. Fall, spring, and summer.

Prerequisites: C15.0002, C15.0007, and permission of the undergraduate program coordinator.

Supplementary study for students taking course work where additional points are needed. An opportunity for a few seniors each year to work one-on-one with a faculty member on a topic the student selects. The student is expected to spend as much time on the independent study as would be spent on a regular course, and the topic selected may not replicate an existing course. An information sheet on the course is available at the front desk of the Department of Finance (Henry Kaufman Management Center, Room 9-190) or on the department's Web site at www.stern.nyu.edu/fin.



Robert F. Whitelaw, Associate Professor of Finance