

## DEPARTMENT OF ACCOUNTING AND FINANCE

### Faculty

Arindam Bandopadhyaya, Associate Professor and Chair; Professors Lal Chugh, Lawrence Franko, Eric Hayden; Associate Professors Thomas Hogan, Kiran Verma, Sally Wright; Assistant Professors Julia Brennan, Atreya Chakraborty, James Grant, Holly Hanson Johnson, Anne Jones, Elizabeth Connors; Lecturers Carolyn Ogden, Zaur Rzakhanov, Alan Vogel

### The Department

The Department of Accounting and Finance offers concentrations in accounting and finance to prepare students for a range of careers in public, private, or not-for-profit organizations. The department also offers students, regardless of their eventual concentrations, a solid grounding in accounting and finance that will contribute to their professional preparation. At the upper levels, specialized concentration courses are designed to qualify students for specific professional careers. The department also offers sequence of courses offered below, that help students become qualified for various professional certifications.

### Concentrations

#### Accounting

The concentration in accounting provides students with a broad understanding of both accounting theory and techniques in preparation for a full range of career opportunities in the private, public and non-profit sectors. The curriculum reflects the knowledge and skills necessary for professional success in this dynamic and critical area of business. While the foundation courses for the accounting concentration are prescribed, the program allows students to pursue a focus on either public or managerial accounting.

Students who pursue the accounting concentration will be prepared to enter a variety of careers within the accounting profession, including budget analyst, financial accountant, managerial accountant, taxation specialist, auditor and more. Additionally, the department offers as courses which can lead to professional certification, such as Certified Public Accountant (CPA).

#### Requirements (21 credits)

- AF 310 (Intermediate Accounting I)
- AF 311 (Intermediate Accounting II)
- AF 315 (Accounting Information Systems)
- AF 363 (Cost Accounting)

- AF 450 (Federal Taxation I)
- AF 470 (Financial Auditing)

And one of the following:

- AF 330 (Business Law)
- AF 410 (Advanced Accounting)
- AF 433 (Accounting for Non-Business Organizations)
- AF 451 (Federal Taxation II)
- AF 463 (Advanced Managerial Accounting)
- AF 472 (AIS Audit and Control)
- AF 478 (Special Topics in Accounting)
- AF 480 (Internship in Accounting)
- AF 485 (Small Business Practicum)
- AF 488 (Independent Study)
- Any other approved accounting course

The accounting curriculum offers opportunities for the preparation of a wide variety of professional certifications such as Certified Public Accountant (CPA), Certified Internal Auditor (CIA), Certified Management Accountant(CMA) and Certified Information Systems Analyst (CISA).

Students should take careful note that requirements for professional certificates demand highly specialized course work; therefore, prior to electing such a program of study, all students should talk with faculty advisors.

#### Certified Public Accountant (CPA)

Students planning careers as CPAs should follow a special program towards meeting the requirements of the various state statutes regulating eligibility for the CPA examination, including the following courses:

- AF 310 (Intermediate Accounting I)
- AF 311 (Intermediate Accounting II)
- AF 315 (Accounting Information Systems)
- AF 330 (Business Law )
- AF 410 (Advanced Accounting)
- AF 450 (Federal Taxation I)
- AF 451 (Federal Taxation II)
- AF 470 (Financial Auditing)
- AF 472 (AIS Audit and Control)

Note that the Board of Accountancy of the Commonwealth of Massachusetts in 2002 passed a 150-credit-hour requirement for the CPA exam. Students interested in taking the Massachusetts CPA exam should consider the Master's of Science in Accounting program, also offered by the College of Management.

#### Certified Internal Auditor (CIA)

Students preparing for careers as certified internal auditors (CIA) should plan a special program around the requirements recommended by the Institute of Internal Auditors. At a minimum, the program should include:

- AF 310 (Intermediate Accounting I)
- AF 311 (Intermediate Accounting II)
- AF 315 (Accounting Information Systems)
- AF 363 (Cost Accounting)
- AF 463 (Advanced Managerial Accounting)
- AF 472 (AIS Audit and Control)

as well as other courses from the accounting, finance and management sciences offerings. Students should consult CIA literature early in the senior year to obtain the latest requirements and application dates for the certification examination.

#### Certified Managerial Accountant (CMA)

Students intending to sit for the Certificate in Management Accounting (CMA) should plan a special program set around the requirements set by the Institute of Management Accounting of the National Association of Accountants. At a minimum, the program should include:

- AF 310 (Intermediate Accounting I)
- AF 311 (Intermediate Accounting II)
- AF 315 (Accounting Information Systems)
- AF 363 (Cost Accounting)
- AF 410 (Advanced Accounting)
- AF 450 (Federal Taxation I)
- AF 451 (Federal Taxation II)
- AF 463 (Advanced Managerial Accounting)

#### Finance

The finance concentration offers courses in corporate finance, investment and portfolio management, financial institutions, and financial policy. The curriculum has been carefully designed to reflect the essential knowledge and skills necessary for success in the exciting and challenging field of finance. However, finance concentrators have flexibility with their choices regarding curriculum focus.

# Department of Accounting and Finance

There are numerous opportunities for financial executives. They can work in financial institutions, industrial and service companies, as well as governmental units and agencies. Graduates of the program have found employment as financial analysts, controllers, insurance adjusters, investment bankers, portfolio managers, and more.

## Requirements (15 credits)

- AF 325 (Theory of Finance)
- AF 335 (Investments)
- AF 495 (Financial Policy)

And two of the following:

- AF 425 (Topics in Corporate Financial Management)
- AF 426 (Financial Modeling)
- AF 435 (Derivative Securities)
- AF 445 (Markets and Financial Institutions)
- AF 455 (International Financial Management)
- AF 475 (Real Estate Finance and Investment)
- AF 478 (Special Topics in Accounting and Finance)
- AF 485 (Small Business Practicum)

Early in the senior year, students interested in certification as Chartered Financial Analysts (CFAs) should consult literature from the Institute of Chartered Financial Analysts for requirements and examination dates and should then follow the appropriate program of study.

## Accounting Courses

### AF 210 Financial Accounting

Presents the theory and techniques of financial accounting. The course encompasses the basic functions of collecting, processing, and reporting accounting information for interested third parties (e.g. owners, investors, and government) and enables students to analyze, interpret, and use accounting information effectively.  
*Prerequisite: 30 credits.*

3 Lect Hrs, 3 Credits

### AF 211 Managerial Accounting

Presents the theory and technique of managerial accounting, from the particular perspective of the manager. The course covers the identification and analysis of the behavior of costs within the organization, and illustrates how managers use such knowledge

for planning and control. Major topics include responsibility accounting, comprehensive and cash budgeting, standard job order and process cost systems, cost-volume-profit analysis, cost allocation, activity-based costing, standard costs, and variance analysis.

*Prerequisites: AF 210 and 30 credits.*

3 Lect Hrs, 3 Credits

### AF 310 Intermediate Accounting I

This is the initial course in the intermediate accounting sequence, to be followed by AF 311. This course provides knowledge of financial accounting theory, with particular emphasis on the application of theory and on the practical problems arising from the limitations of traditional financial statements. It also provides in-depth analysis of the application of generally accepted accounting principles to asset and current liability items. In addition, students learn to research business problems through the use of the Internet; and discuss ethical issues faced by managers.

*Prerequisites: AF 211 and 60 credits.*

3 Lect Hrs, 3 Credits

### AF 311 Intermediate Accounting II

This is the second course in the intermediate accounting sequence. This course continues to develop accounting theory, using principles, concepts, and accounting pronouncements to analyze and resolve accounting issues. Students acquire an understanding of issues unique to corporations and complete the study of the balance sheet by examining long-term debt and equity issues. In addition, they discuss ethical issues faced by managers in today's business world. Continuing emphasis will be placed on computer application skills, research skills and written and oral communication skills. It is recommended that students take AF 301 before AF 311.

*Prerequisites: AF 310 and 60 credits.*

3 Lect Hrs, 3 Credits

### AF 315 Accounting Information Systems

This course examines the design, implementation, operation, and control of contemporary computer-based accounting information systems. Students complete projects which require the use of current information technology to solve real world problems.

*Prerequisites: AF 211 and 60 credits.*

3 Lect Hrs, 3 Credits

### AF 330 Business Law

Examines the body of law involved in the formation, operation, and termination of business organizations; in contracts; in debtor-creditor relations; in uniform commercial code (sales, commercial paper, secured transactions); in property, estate, and trust; in government regulations; and in issues of CPA liability. Course content encompasses the topics to be found on the CPA law examination.

*Prerequisites: AF 211 and 60 credits.*

3 Lect Hrs, 3 Credits

### AF 363 Cost Accounting

Examines the design, implementation and operation of cost accounting systems. With primary emphasis on cost analysis in manufacturing, the course explores cost standards, actual performance, and variances. To a lesser extent, it also applies concepts of cost accounting to manufacturing and service organizations.

*Prerequisites: AF 211 and 60 credits.*

3 Lect Hrs, 3 Credits

### AF 410 Advanced Accounting

Develops in depth understanding of financial accounting and reporting in the following areas: business combinations, consolidated financial statements, foreign currency transactions, translation of financial statements of foreign affiliates, reorganization and liquidation, partnerships and other advanced areas. Continues to build on skills acquired from AF 310 and 311 while providing comprehensive treatment of selected topics.

*Prerequisites: AF 311 and 60 credits.*

3 Lect Hrs, 3 Credits

### AF 433 Accounting for Non-Business Organizations

Develops the specialized knowledge of finance and accounting necessary for the successful financial management of such non-business organizations as governmental agencies, foundations, hospitals, and universities. The course particularly stresses fund accounting as well as the accounting principles appropriate to such organizations.

*Prerequisites: AF 310 and 60 credits.*

3 Lect Hrs, 3 Credits

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## AF 450

### Federal Taxation I

Studies the law and procedures of the federal income taxation of individual taxpayers. The course presents the income tax concepts of gross income recognition, deductions, tax credits, and the effects of property transactions.

*Prerequisites:* AF 211 and 60 credits.

3 Lect Hrs, 3 Credits

## AF 451

### Federal Taxation II

Applies the income tax concepts presented in AF 450 to corporations, partnerships, Subchapter S corporations, trusts, and estates. The course introduces the concepts of the federal gift tax and the federal estate tax.

*Prerequisites:* AF 450 and 60 credits.

3 Lect Hrs, 3 Credits

## AF 463

### Advanced Managerial Accounting

Continues the study of cost accounting, with emphasis on the managerial application of cost data and financial accounting information to decision making. Includes studies in relevant costs, cost behavior analysis, risk analysis as applied to capital budgeting, inventory management, cost allocation, and variance analysis.

*Prerequisites:* AF 363 and 60 credits.

3 Lect Hrs, 3 Credits

## AF 470

### Financial Auditing

Encompasses both the theory and the technique of financial auditing. The course examines the professional role of the auditor, along with its operational, ethical, and legal implications. Areas typically covered include professional auditing standards, the auditors' report, specialized reporting issues, auditors' legal responsibilities, gathering and evaluating evidence, the internal control structure audit sampling, and the Code of Professional Conduct. Discussions consider issues of judgment typically faced by auditors in practice.

*Prerequisites:* AF 311 and 60 credits.

3 Lect Hrs, 3 Credits

## AF 472

### AIS Audit and Control

Designed for students preparing for a career in internal accounting, auditing, or systems assurance. The course reviews concepts, design, and control of computer-based systems; examines the systems audit process; employs computer-based methods to evaluate simulated client systems; and

examines the nature and impact of computer-assisted crime. It is recommended that students take AF 315 and AF 470 before taking AF 472.

*Prerequisites:* AF 310 and 60 credits.

3 Lect Hrs, 3 Credits

## AF 478

### Special Topics in Accounting

Addresses a specific topic in accounting. Special topics courses are offered as one-time supplements to the department's curriculum. Descriptions of special topics courses are available during advance registration.

*Prerequisite:* Permission of instructor and 60 credits.

3 Lect Hrs, 3 Credits

## AF 480

### Accounting Internship

Provides students with opportunities for full- or part-time work experience in an accounting or finance setting. On-site supervisors and faculty sponsors provide guidance and supervision for each intern.

*Prerequisites:* 75 credits, of which 21 must be in management core; one concentration course; minimum 2.5 GPA; permission of chair.

3 Credits

## AF 485

### Small Business Institute Practicum

Through this practicum students have the opportunity to apply financial, marketing, and other management principles to selected small business concerns. The course, offered in cooperation with the Small Business Administration, lets students offer management counseling and technical assistance to small business organizations. Students work in teams with faculty guidance.

*Prerequisites:* AF 301 and 60 credits. (AF 325, AF 335, and AF 465 are recommended.)

3 Credits

## AF 488

### Independent Study

A student-initiated research project on an accounting topic, supervised by a member of the accounting faculty. The course is open to a limited number of students each semester.

*Prerequisite:* Permission of instructor.

3 Credits, Hrs by arrangement

## Finance Courses

## AF 201

### Personal Finance

Introduces students to planning and managing personal and family finances. Topics include insurance and estate planning, relationships with banks, issues in home ownership and real estate, the fundamentals of investing in stocks and bonds, tax planning, leasing as compared with buying automobiles, and financing college education. This course cannot be counted toward the finance or accounting concentration in the College of Management.

3 Lect Hrs, 3 Credits

## AF 301

### Introduction to Financial Management

Introduces financial management (both short term and long term), specifically what an organization invests in, and how the necessary funds are best raised; the course also acquaints students with various kinds of securities and the operation of financial markets and institutions. Specific topics include ratio analysis, working capital management, financial markets and institutions, the time value of money and capital budgeting, the cost of capital, financial leverage and capital structure, and dividend policy.

*Prerequisites:* AF 211 and 60 credits.

*Students are strongly recommended to take ECON 101 and 102, MATH 134 and MSIS 111 before taking AF 301.*

3 Lect Hrs, 3 Credits

## AF 325

### Theory of Corporate Finance

Provides a sound understanding of the principles of and analytical techniques used in financial management. The course describes financial decision making by corporations and shows how it can be used to address practical problems and illuminate institutional aspects of the financial world. Topics include review of valuation concepts, cost of capital, advanced capital budgeting, capital structure theories, dividend policy, IPOs, long-term financing and working capital management.

*Prerequisites:* AF 301 and 60 credits.

3 Lect Hrs, 3 Credits

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## **AF 335 Investments**

Provides the student with an understanding of capital market securities, operations, valuation, and investment techniques.

Specifically, the course covers definitions of various investment vehicles, operation of the NYSE and NASDAQ markets, portfolio theory (CAPM and APT), valuation of stocks and bonds, and investor capital allocation decisions, including discussions of mutual fund selection.

*Prerequisites: AF 301 and 60 credits.*

3 Lect Hrs, 3 Credits

## **AF 425 Topics in Corporate Financial Management**

Builds on the principles and concepts developed in AF 325 and introduces several new topics including real options, risk management techniques, convertible securities, leasing and mergers and acquisitions. It is recommended that students take AF 335 before AF 425.

*Prerequisites: AF 325 and 60 credits.*

3 Lect Hrs, 3 Credits

## **AF 426 Financial Modeling**

Introduces the principles and techniques for building financial models, especially in an uncertainty framework. Topics include decision support systems, risk analysis and capital budgeting under uncertainty. Integrates financial, accounting and statistical concepts and techniques to construct financial models and to perform analyses using micro-computer based software.

*Prerequisites: AF 301 and 60 credits.*

3 Lect Hrs, 3 Credits

## **AF 435 Derivative Securities**

Derivative securities are contracts whose payoffs are derived from the outcome of another security or asset price. This course focuses on the valuation and (mis)use of derivative securities. Specifically the course covers: history of derivatives, valuation of forwards, futures, swap and option contracts and the use of derivative securities to hedge financial risk, particularly interest rate and foreign currency risk. It is recommended that students take AF 335 before 435.

*Prerequisites: AF 301 and 60 credits.*

3 Lect Hrs, 3 Credits

## **AF 445 Markets and Financial Institutions**

Examines the role of financial markets and institutions in the economy. The course focuses on the working of various financial markets and how financial institutions and other users interact with financial markets. Topics include interest rates; term structure of interest rates; money and capital markets; innovations in capital markets; credit risk and asset and liability management; international financial markets; currency fluctuations; and management of currency risk.

*Prerequisites: AF 301 and 60 credits.*

3 Lect Hrs, 3 Credits

## **AF 455 International Financial Management**

Provides the student with the knowledge and skills needed by managers in organizations active in international trade, facing foreign competition, or involved in foreign direct investment. The course focuses on the unique international variables and constraints which modify single-country financial management concepts. Topics include the determination of exchange rates, forecasting exchange rates, foreign exchange risk management, transfer pricing policies, multinational capital budgeting with cash flows in more than one currency, international financial markets, and country risk in multinational investment decisions.

*Prerequisites: AF 301 and 60 credits.*

3 Lect Hrs, 3 Credits

## **AF 475 Real Estate Finance and Investment**

Deals with the financing, valuation, and development of real estate investments. The course examines the theoretical and pragmatic models of valuation, the financial structure of successful developments, and the appropriate models of investment choice and portfolio management for real estate investors. It develops an appreciation of the similarities and differences between real and financial assets, and integrates the techniques of real estate analysis with those of corporate finance. Students are expected to participate actively in analyzing real estate investments and developments through case studies, and through interaction with executives from the investment, development, and lending communities.

*Prerequisites: AF 301 and 60 credits.*

3 Lect Hrs, 3 Credits

## **AF 478 Special Topics in Finance**

Addresses a specific topic in finance. Special topics courses are offered as one-time supplements to the department's curriculum. Descriptions of special topics courses are available during advance registration.

*Prerequisite: 60 credits.*

3 Lect Hrs, 3 Credits

## **AF 485 Small Business Practicum**

Through this practicum students have the opportunity to apply financial and general management principles to activities in selected small business concerns. Working in teams with faculty guidance, students offer financial management counseling and technical assistance to small organizations, *Prerequisites: AF 301 and 60 credits. (AF 325, AF 335, and AF 465 are recommended.)*

3 Credits

## **AF 488 Independent Study**

A student-initiated research project on a finance topic, supervised by a member of the finance faculty. The course is open to a limited number of students each semester. *Prerequisites: Permission of instructor and 60 credits.*

3 Credits, Hrs by arrangement

## **AF 495 Financial Policy**

Utilizes the case study method to apply theoretical concepts and techniques learned in previous courses to the analysis of real situations and practical problems in financial management and policy. Some cases will have a strong international focus. This course is intended as a "capstone" course to be taken after all other concentration courses. It provides an opportunity for reviewing, integrating, and putting into practice the skills acquired in previous courses.

*Prerequisites: AF 325 and AF 335 and 60 credits.*

3 Lect Hrs, 3 Credits