FINANCE Section 61.70

# **Faculty**

Associate Professor and Chair of the Department RAHUL RAVI, PhD University of Alberta

Professor Emeritus

ABRAHAM BRODT, PhD New York University

#### **Professors**

ALAN HOCHSTEIN, PhD McGill University ARVIND JAIN, PhD University of Michigan

LAWRENCE KRYZANOWSKI, PhD University of British Columbia; Concordia University Research Chair in Finance

STYLIANOS PERRAKIS, PhD University of California, Berkeley; RBC Professor in Financial Derivatives; Provost's Distinction

LATHA SHANKER, PhD University of Florida

LORNE SWITZER, PhD University of Pennsylvania; Van Berkom Chair in Small-Cap Equities

THOMAS WALKER, PhD Washington State University

## Associate Professors

NILANJAN BASU, PhD Purdue University, CFA

SANDRA BETTON, PhD University of British Columbia, CFA; Associate Dean, Professional Graduate Programs

HARJEET BHABRA, PhD University of Missouri-Columbia

SERGEY ISAENKO, PhD University of Pennsylvania

GREGORY LYPNY, PhD University of Toronto

RAVI MATETI, PhD University of Connecticut

IMANTS PAEGLIS, PhD Boston University

IAN RAKITA, PhD Concordia University, CFA; Director, Goodman Institute of Investment Management

DENIS SCHWEIZER, PhD European Business School; Director, Van Berkom Investment Management Program;

Manulife Professor in Financial Planning

YUAN WANG, PhD Pennsylvania State University

## Assistant Professors

FREDERICK DAVIS, PhD Queen's University

DAVID NEWTON, PhD University of British Columbia, CFA

JULIANE PROELSS, PhD European Business School

SAIF ULLAH, PhD University of Alberta

TINGYU ZHOU, PhD University of Connecticut

#### Senior Lecturers

REENA ATANASIADIS, MBA Concordia University; Director, Kenneth Woods Portfolio Management Program LORETTA HUNG, MScAdmin Concordia University

#### Lecturers

LOBNA BOUSLIMI, PhD *Université de Montréal* RAAD JASSIM, MEng *McGill University* 

NAJIB KHAN, PhD University of Ottawa

NICOLAS MOUGEOT, PhD Université de Lausanne

EDWARD WONG, MBA University of Western Ontario

#### Scholars in Residence

MOHAMMAD BITAR, PhD Université Grenoble Alpes

SERGEY GELMAN, PhD University of Munster

For the complete list of faculty members, please consult the Department website.

## Location

Sir George Williams Campus MB Building, Room: 012-205 514-848-2424, ext. 2789

# **Department Objectives**

The Department of Finance is committed to excellence in both research and teaching and has earned a solid reputation as a productive and research oriented academic unit. The Department's research activities include theoretical, empirical, and applied contributions — all aimed at furthering knowledge in the field. Its teaching activities cover a wide range of topics including corporate finance, investment, international finance, personal finance, optimization techniques, portfolio management, options and futures and fluctuations in security prices, exchange rates, and interest rates.

Teaching effectiveness represents the cornerstone of the Department's teaching objectives. The Department's curriculum is a dynamic one which keeps up with current trends and innovations in the financial area. Department members have been recognized not only with Faculty Teaching Awards but also internationally by winning the 3M Teaching Fellowship Award.

The Department has developed orientation and training programs with major corporations and financial institutions for its students. Through this type of external involvement, classroom teaching is effectively blended with the complexities of the real world thereby providing students not only with a more meaningful education but also with job opportunities.

# **Programs**

- 30 Honours in Finance
- 3 FINA 385
- 3 FINA 395
- 18 additional 400-level credits offered by the Department
  - 6 FINA 495

Students are eligible to apply to the honours program if they have completed FINA 385, FINA 395, and six additional credits in Finance. Applicants must have achieved a minimum cumulative GPA of 3.3 and a minimum GPA of 3.5 in their Finance courses. Enrolment in this program is limited. The selection process may include recommendations from faculty members as well as interviews of applicants to this program. The deadline for applications is March 1.

Students must maintain a minimum cumulative GPA of 3.3, a minimum GPA of 3.5 in their Finance courses and achieve a minimum grade of B+ in FINA 495 to remain in the Honours in Finance program. Students who are withdrawn from the honours program may proceed in the Major in Finance.

- 24 Major in Finance
- 3 FINA 385
- 3 FINA 395
- 18 additional 400-level credits offered by the Department
- 12 Minor in Finance
- 3 FINA 385
- 3 FINA 395
- 6 additional 400-level credits offered by the Department

## Finance Co-operative Program

Director LORETTA HUNG, Lecturer 514-848-2424, ext. 5114

The Finance co-operative program is offered to students who are enrolled in the BComm program and are majoring in Finance. The academic content of the co-op program is identical to that of the regular program, but three work terms are interspersed with six study terms.

Students are supervised individually and must meet the requirements specified by both the John Molson School of Business and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Finance co-op academic director and the co-op committee.

Please refer to §24 of this Calendar for a full description of the co-operative format of the program.

## Courses

## FINA 200 Personal Finance (3 credits)

This course is offered online. It is designed to help individuals better manage their current and future financial affairs. The course introduces the terminology and basic concepts underlying personal financial management. It helps students set goals and develop skills to conduct basic research when making personal financial decisions. The topics covered include financial planning, money management, personal income taxes, costs of consumer credit, concepts of time value of money, investing in stocks, bonds and mutual funds, mortgages, and retirement planning.

NOTE: Finance Majors and Minors may not take this course for credit towards their major or minor.

NOTE: Students who have received credit for this topic under a COMM 499 number may not take this course for credit.

### FINA 210 Introduction to Real Estate (3 credits)

This course introduces the concepts, principles, analytical methods and tools used for investment, development, and evaluation of real estate assets. The course focuses on issues such as market and feasibility analysis, investment property analysis, forms of ownership, valuation by alternate approaches, mortgages, borrower-lender relationships, investing in income property, commercial property financing, real estate investment trusts (REITs), and legal and property rights among co-owners.

NOTE: Finance Majors and Minors may not take this course for credit towards their major or minor.

NOTE: Students who have received credit for FINA 450 or for this topic under a COMM 499 number may not take this course for credit.

## FINA 230 Introduction to Financial Management (3 credits)

This course provides an overview of financial management and introduces the basic terms as well as the role finance plays in the firm and in markets. Specifically, this course covers the following topics: the importance of a working knowledge of finance to non-business students; the role of the financial manager; the differences between accounting income and cash flow and between book value and market value; the role of interest rates in the Canadian economy; the interpretation of financial ratios; the concept of time value of money; and making financial decisions.

NOTE: JMSB students may not take this course for credit.

NOTE: This course does not count towards the requirements for the Minor in Business Studies.

NOTE: Students who have received credit for this topic under a COMM 299 number may not take this course for credit.

## FINA 310 Real Estate Development and Entrepreneurship (3 credits)

Prerequisite: COMM 308; FINA 210 or 450. This course focuses on fundamental concepts and analytic tools applied in real estate development. It incorporates the interdisciplinary character and the entrepreneurial nature of the development process. It covers different interactive stages and discusses the roles and motivations of various stakeholders involved in this decision-making process. In addition to the analysis of financial returns, this course may include discussion on the economic, social and environmental costs and benefits. Pedagogical methods include lectures, guest speakers, case studies, group project and field trip/property tour.

# FINA 320 Real Estate Investment (3 credits)

Prerequisite: COMM 308; FINA 210. This course focuses on analytical tools used for making commercial real estate investment decisions. It introduces students to methods of estimating and analyzing basic measures of performance at the property level. Students learn how to identify financial risks associated with real estate investment and prepare discount cash flow analyses for the projected holding periods. Topics covered include the fundamentals of publicly traded real estate, real estate investment trusts (REITs) and analysis at the portfolio level. Pedagogical methods include lectures, class discussion on contemporary issues in the real estate market, guest speakers, case studies, group project and evaluation of potential commercial real estate for investment purposes.

NOTE: Students who have received credit for FINA 450 may not take this course for credit.

# FINA 370 (also listed as IBUS 370)

## International Financial Management (3 credits)

Prerequisite: COMM 220, 308. This course is designed for students to acquire and demonstrate knowledge of the fundamental principles and issues in international financial management. It covers such topics as foreign exchange markets, exchange rate behaviour, structure and meaning of the international balance of payments, the functioning of fixed and floating exchange rate systems, short- and long-term investment and borrowing decisions, euro-currency markets, foreign exchange risk management, and capital budgeting decisions for overseas investment. In sum, the topics are covered from the perspective of an individual who wishes to know how the international financial environment will affect the firm.

NOTE: Finance Majors and Minors may not take this course for credit toward their major or minor.

NOTE: Students who have received credit for IBUS 370 or FINA 470 may not take this course for credit.

## FINA 382 (also listed as IBUS 382)

## Management of International Financial Institutions (3 credits)

Prerequisite: COMM 308; MARK 462 or IBUS 462. This course provides students with an understanding of challenges and opportunities that banks and other financial institutions face in their global operations. It covers operations of financial firms in mature as well as emerging markets. Topics include an assessment of opportunities in foreign markets and difficulties that financial institutions face when dealing with unfamiliar economic and political environments; unique operations and challenges in international markets such as microfinance, international loans, project financing and assessment of political or sovereign risks, importance of global regulation and governance, and ethical issues associated with international operations within the financial services industry.

NOTE: Finance majors and minors may not take this course for credit toward their major or minor.

NOTE: Students who have received credit for FINA 482 or IBUS 382, or for this topic under a FINA 455 or IBUS 471 number, may not take this course for credit.

## FINA 385 Theory of Finance I (3 credits)

Prerequisite: COMM 220, 308. This course is the first of two that provide a theoretical foundation upon which subsequent 400-level courses will be built. The course examines the allocation of capital in financial markets and the determination of the relative prices of financial assets. Topics covered include utility theory, arbitrage pricing theory, and asset pricing models such as the Capital Asset Pricing Model and the option pricing model. Applications explored include arbitrage, the design of markets and the appropriate responses of individuals and firms to changes in market conditions as well as to market imperfections.

NOTE: Students who have received credit for FINA 380 may not take this course for credit.

#### FINA 395 Theory of Finance II (3 credits)

Prerequisite: COMM 220, 308; FINA 385 previously or concurrently. This course focuses on the financial theory of the firm and examines the Modigliani-Miller propositions, agency theory, and asymmetric information theory. Topics covered include capital structure and the cost of capital, investment and financing decisions, real options, valuation and issuance of new securities, mergers and acquisitions, and leveraged buyout decisions.

NOTE: Students who have received credit for FINA 390 or 400 may not take this course for credit.

## FINA 402 Short-Term Financial Management (3 credits)

Prerequisite: FINA 380 or 385; FINA 390 or 395. This course is concerned with the key aspects of short-term financial management. It begins with a brief coverage of the institutional environment facing the financial manager in Canada. A detailed coverage of sources for short-term borrowing and investments is presented. The structure of the Canadian financial system along with a description of the various methods of effecting payments as well as the clearing and settlement system are covered. Topics in overall liquidity management are briefly reviewed from a theoretical perspective. Traditional subjects in cash management such as collections, disbursement and control, forecasting, company bank relationship, short-term investment, and borrowing are examined next. Such new developments as electronic data interchange and EFT/POS are also examined. The course also provides a coverage of trade credit both from a theoretical positive standpoint and a normative viewpoint.

#### FINA 405 Cases in Finance (3 credits)

Prerequisite: FINA 380 or 385; FINA 390 or 395. This course uses case discussions to focus on the application of the principles of finance learned in FINA 385 and 395 in real-world contexts. Cases cover topics in corporate finance, investments, and financial markets and institutions.

NOTE: Students who have received credit for FINA 490 may not take this course for credit.

## FINA 408 Building and Testing Trading Systems Using Technical Analysis (3 credits)

Prerequisite: FINA 385, 395. This course provides a basic level of understanding of various technical analysis methodologies that are used by investment professionals and the investing public. The course examines market microstructure and order entry mechanics, high-frequency trading, behavioural finance and the efficient market hypothesis. The main topics include analysis of price charts to forecast future price trends and patterns, development and testing of a trading system, Dow theory, moving averages, momentum, sentiment, relative strength and intermarket analysis. This course is an excellent preparation for several investment industry designations. Pedagogical methods include lectures, a presentation by an industry expert, and a group project to build and test a trading system using simulation and investment software in the John Dobson – Formula Growth Investment Room.

NOTE: Students who have received credit for this topic under a FINA 455 number may not take this course for credit.

## FINA 409 Applied Investment Analysis (3 credits)

Prerequisite: Permission of the Department. This course focuses on evaluating stocks using modern valuation methods. The main topics include understanding the different investment styles, reading and interpreting financial statements from an investor's perspective, industry analysis and stock analysis. Pedagogical methods include lectures, discussion of books, presentations by industry experts, use of the Formula Growth Investment Room and evaluation of potential companies for investment purposes. NOTE: Students who have received credit for FINA 410 or for this topic under a FINA 455 number may not take this course for credit.

## FINA 410 Investment Analysis (3 credits)

Prerequisite: FINA 385, 395. This course focuses on investment valuation, particularly equity valuation, from the viewpoints of both the individual investor and the institutional investor. Students learn how to analyze industries, sectors and individual companies. Topics include a range of valuation models such as the dividend discount model, the comparable assets model, and the free cash flow model, to determine the intrinsic value of a stock. Students learn how to use investment tools such as Bloomberg for investment analysis. Students are required to prepare an industry analysis and stock recommendation using live data at the end of the course.

NOTE: Students who have recieved credit for FINA 409 may not take this course for credit.

## FINA 411 Portfolio Management (3 credits)

Prerequisite: FINA 385, 395. This course focuses on modern investment theory and its application to portfolio management for individuals and institutions, such as mutual funds, hedge funds, pension plans and endowments. Topics include: a) construction of optimal portfolios, b) theory and tests of the classic capital asset pricing models, c) arbitrage pricing theory and multifactor models, d) criteria for evaluation of investment performance, and e) some of the latest strategies in active and passive portfolio management. In addition to the textbook, students read journal articles, discuss cases and learn investment software in the John Dobson – Formula Growth Investment Room.

## FINA 412 Options and Futures (3 credits)

Prerequisite: FINA 380 or 385; FINA 390 or 395. This course is a comprehensive analysis of the options and futures markets in North America. The student is introduced to the different markets for these instruments and their institutional details. The different types of options and futures currently trading are examined. The principles of valuation of futures and options, their use in risk management through hedging techniques and their use in speculative strategies are studied. Emphasis is placed on the analysis of financial options and futures.

#### **FINA 413** Advanced Topics in Derivative Markets (3 credits)

Prerequisite: FINA 412. This course focuses on advanced topics in the area of derivatives. Topics covered include the valuation of derivatives using numerical procedures and martingales, modelling the term structure of interest rates, valuation of interest rate swaps, interest rate options, caps, floors, swaptions and exotic options, and application of derivatives in risk management such as value at risk models, estimation of volatility and credit risk derivatives.

#### Mergers and Acquisitions (3 credits) **FINA 415**

Prerequisite: FINA 380 or 385; FINA 390 or 395. This course examines the financial aspects of mergers and acquisitions. Basic financial theory and empirical evidence related to corporate control activity is discussed. Some of the topics covered include target identification and valuation, bidding strategies, defensive strategies, financing strategies and growth by acquisition strategies. In addition, going private transactions such as leverage buyouts and management buyouts are discussed.

### Behavioural Finance (3 credits)

Prerequisite: FINA 385, 395. This course examines how the behaviour of managers, boards of directors, or financial analysts deviates from models of "rational" behaviour in some situations, and how these deviations affect shareholder wealth. The course explores how behavioural characteristics like mental accounting, overconfidence, herding, framing and loss aversion cause the assumptions of rational economic behaviour to break down at both the individual and systemic levels. NOTE: Students who have received credit for this topic under a FINA 455 number may not take this course for credit.

#### **FINA 420** Real Estate Finance (3 credits)

Prerequisite: COMM 308; FINA 210. The course focuses on concepts, principles and analytical methods of real estate finance. It begins with a comprehensive investigation of mortgages from the perspective of both borrowers and lenders. The basics are then applied to analyze mortgage risk, commercial mortgage-backed securities (CMBS), market and mortgage securitization, as well as investment decisions on acquisition and financing of commercial real estate assets. Pedagogical methods include lectures, class discussions on contemporary issues, guest speakers, case studies, group project and risk analysis of mortgage-backed securities. NOTE: Students who have received credit for FINA 450 may not take this course for credit.

#### Seminar in Finance (3 credits)

This course is intended primarily for Finance Majors and Minors. It provides an opportunity for more intensive study in one or more specific topics of finance. The topic varies according to the special interests of the professor and the students. Enrolment is restricted and is subject to departmental approval.

NOTE: Specific topics for this course and prerequisites relevant in each case are stated in the Undergraduate Class Schedule.

### Trading in Financial Securities (3 credits)

Prerequisite: FINA 412, permission of the Department. This course focuses on developing practical skills in trading financial securities. Topics covered include general trading practices, fundamental and technical analysis, term structure of interest rates, arbitrage opportunities, and trading strategies using options, futures and options on futures contracts. Speakers from the finance industry are also invited to share their experiences with the students.

NOTE: Students who have received credit for this topic under a FINA 455 number may not take this course for credit.

#### **FINA 470** International Finance (3 credits)

Prerequisite: FINA 385, 395. This course introduces students to the essentials of international financial management. After a brief introduction to the international monetary system, we study the organization of the foreign currency and international financial markets. The course then discusses the determinants of exchange rates, followed by a discussion of the risks that businesses operating in international markets face due to changing exchange rates and financial turmoil in international financial markets. The subsequent sections of the course are devoted to understanding techniques and strategies for managing different types of exchange risks after various foreign currency derivatives — forward, futures, options and swaps — have been studied. NOTE: This course is offered for Finance Majors and Minors only.

NOTE: Students who have received credit for FINA 370 or IBUS 370 may not take this course for credit.

# Multinational Financial Management (3 credits)

Prerequisite: FINA 470. This course addresses advanced issues that corporations or investors face when they expand their operations in the international markets. Corporations face challenges in the areas of international capital budgeting, determining their cost of capital and their capital structure, assessment of political risk, international working capital management, financing international trade and international corporate governance. This course discusses how these decisions become more complex in an international environment due to changing exchange rates and multiplicity of economic and political environments. The course also addresses the difficulties of choosing appropriate pricing models in an international context.

# Management of Financial Institutions (3 credits)

Prerequisite: FINA 385, 395. This course provides students with an integrating framework for examining various types of financial institutions and the means of managing their operations. Topics include uniqueness of financial institutions; application of portfolio and corporate finance theories to the management of assets, liabilities, capital structure and off-balance sheet operations; interest rate and liquidity risk exposure; loan portfolio management, loan pricing and credit rationing; capital adequacy and regulatory environment. The strategic repercussions for such institutions, given the rapidly changing financial and regulatory environments, are also reviewed through the analysis of cases illustrating current issues.

NOTE: Students who have received credit for FINA 480 may not take this course for credit.

## FINA 482 International Banking: Operations, Policy and Strategy (3 credits)

Prerequisite: FINA 481 previously or concurrently. This course provides students with an integrating framework to understand the risks, challenges and opportunities that banks face in their global operations. The course covers both commercial and investment banking activities in mature as well as emerging markets. The course begins with an examination of opportunities that foreign markets offer as well as difficulties that banks face when dealing with unfamiliar economic and political environments abroad. This is followed by a discussion of banking operations in international and foreign markets. Topics for this discussion may include microfinance, international loans, project financing and an assessment of political or sovereign risks. The impact of foreign operations on mitigation or enhancement of various risks associated with home country operations is examined. The course also examines the importance of global regulation as well as governance and ethical issues associated with international banking. NOTE: This course is offered for Finance majors and minors only.

NOTE: Students who have received credit for FINA 382 or IBUS 382, or for this topic under a FINA 455 or IBUS 471 number, may not take this course for credit.

### FINA 495 Honours Seminar in Finance (6 credits)

Prerequisite: Enrolment in the honours program. This seminar is offered to honours students in Finance over a period of two terms. In the first term, the seminar covers methodology and recent advances in research in topics covered in the Finance curriculum. In addition, students begin working on a thesis/project to be conducted under the supervision of a faculty member. In the second term, students complete their thesis/project and are required to submit a written report to be presented at the seminar at the end of the term.