# Department of Economics, Finance, and Accounting

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### MISSION STATEMENT

The Department of Economics, Finance, and Accounting offers programs which emphasize the development of critical intelligence and an appreciation for diverse, evidence-based perspectives in order to prepare students for a lifetime of engaged citizenship. Through exposure to the theoretical and empirical methods of these three disciplines, students develop a greater understanding of the complex world in which they live and are able to critically evaluate options available for improving that world. Upon graduation, our students are prepared for careers in a wide array of fields in the private sector (such as accounting, banking and other financial services, law, business administration, marketing, sales, journalism, consulting, or entrepreneurship) or the public sector (government or non-profit accountant/analyst/researcher, etc.). In addition, our graduates are prepared to succeed in graduate school in a variety of disciplines, including accounting, economics, finance, law, and business.

### **MAJOR IN ACCOUNTING (16)**

The Accounting program is designed to enable the student to establish a basic professional competence that will encourage intelligent and effective employment in both profit and nonprofit institutions. The Accounting major is structured to provide students with the basic educational background to sit for various professional examinations. The undergraduate accounting program leading to the Bachelor's degree continues to provide excellent preparation for careers in the corporate, governmental, and not-for-profit sectors as well as entrance into law school and graduate business school.

Certified Public Accountant (CPA) candidates should note that all states have adopted some version of what has come to be called the 150 hours rule. This rule requires 150 semester hours of university education as a condition either to take the Uniform C.P.A. Examination, or to become certified as a CPA In Massachusetts, the requirement to take the CPA exam is 120 semester hours of university education, and then 150 hours of education are required to obtain certification (the CPA license). While the requirement does not specifically call for a graduate degree, 30 additional semester hours (150 hours less the 120 hours required in our undergraduate Accounting program) does represent a full year of study after the Bachelor's degree. Assumption has designed an Accelerated CPA Track M.B.A. program to enable our CPA candidate majors to begin their graduate studies during their senior year, satisfy the additional credit hour requirement, and receive both a B.A. and M.B.A. degree in five years instead of the six years these two degrees customarily require. Students planning to sit for the Uniform CPA Examination should consult with the Accounting faculty no later than fall of their junior year. This will allow the student to devise a strategy for meeting the educational requirements. Additional information about the Accelerated CPA Track M.B.A. program can be found in the catalog section titled Accelerated CPA Track M.B.A. Program below. Complete details of the Accelerated CPA Track M.B.A. program can be obtained from Prof. Michael Lewis, M.B.A. Director, and are explained in depth in the graduate school catalog.

# **REQUIRED COURSES (16)**

ACC 125 Financial Accounting

ACC 126 Managerial Accounting

MGT 100 Introduction to Management

MKT 101 Principles of Marketing

ACC 200 Intermediate Accounting I (fall only)

ACC 201 Intermediate Accounting II (spring only)

ECO 110 Microeconomics

**ECO 111 Macroeconomics** 

ECO 115 Statistics with Excel (MAT 114 is a pre- or co-requisite)

ACC 210 Cost Accounting

ACC 211 Accounting Information Systems

MGT 215 Business Law

FIN 325 Financial Management I

ACC 310 Federal Income Taxes (fall only)
ACC 420 Auditing (fall only)
ACC 320 Advanced Accounting (spring only)

### RECOMMENDED FOUR-YEAR PLAN FOR THE MAJOR IN ACCOUNTING

### First Year

Fall	Spring
ACC 125 Financial Accounting	ACC 126 Managerial Accounting
MGT 100 Introduction to Management	MKT 101 Principles of Marketing

If not taken during the first year the above courses should be taken during the Sophomore year.

#### Sophomore Year

Fall	Spring
ACC 200 Intermediate Accounting I (fall only)	ACC 201 Intermediate Accounting II (spring only)
ECO 110 Microeconomics	ECO 111 Macroeconomics
	ECO 115 Statistics with Excel

Note: ECO 115 requires students to have taken MAT 114 prior to or at the same time. If the Principles of Accounting sequence was not completed during the First year, then Intermediate Accounting I and II can be taken during the Junior year.

### **Junior Year**

Fall	Spring
ACC 210 Cost Accounting	ACC 210 Cost Accounting
OR ACC 211 Accounting Information Systems	OR ACC 211 Accounting Information Systems
MGT 215 Business Law I	MGT 215 Business Law
OR FIN 325 Financial Management I	OR FIN 325 Financial Management I

Note: If intending to apply to the Accelerated CPA Track M.B.A. program, complete the application during the Spring of Junior year in order to take two M.B.A. classes during Senior year.

### **Senior Year**

Fall	Spring
ACC 310 Federal Income Taxes (fall only)	ACC 320 Advanced Accounting (spring only)
ACC 420 Auditing (fall only)	

The following electives are available to supplement the major requirements listed above. None of these courses is required to meet the undergraduate degree requirements, but will assist in fulfilling the educational requirements for certification (see Requirements for Uniform CPA Examination and Certification below).

ACC 250	Personal Finance
ACC 331	Fraud Examination
ACC 332	Forensic Accounting
MGT 321	Corporate Governance
BUS 399	Internship in Business
ACC 260	Community Tax Assistance

The order suggested above is intended as a guide, not intended as an inflexible sequence. For example, many students have successfully completed the major by taking some of the First Year/Sophomore courses in their Junior or even Senior year.

### **MINOR IN ACCOUNTING (7)**

### **REQUIRED COURSES (3)**

ACC 125 Financial Accounting

ACC 126 Managerial Accounting

MGT 100 Introduction to Management OR MKT 101 Principles of Marketing

### **ELECTIVES (4)**

ACC 200 Intermediate Accounting I

ACC 201 Intermediate Accounting II

ACC 210 Cost Accounting

ACC 211 Accounting Info Systems

ACC 250 Personal Finance

ACC 260 Community Tax Assistance

ACC 310 Federal Income Taxes

ACC 320 Advanced Accounting

ACC 331 Fraud Examination

ACC 332 Forensic Accounting

ACC 420 Auditing

# MINOR IN FRAUD EXAMINATION AND FORENSIC ACCOUNTING (7)

### **REQUIRED COURSES**

ACC 125 Financial Accounting
ACC 126 Managerial Accounting
MGT 100 Introduction to Management

ACC/MGT 331 Fraud Examination
ACC 332 Forensic Accounting
MGT 321 Corporate Governance
CYB 115 Cybersecurity Fundamentals

# REQUIREMENTS FOR UNIFORM C.P.A. EXAMINATION AND CERTIFICATION

There are specific requirements to take the C.P.A .Examination in Massachusetts; the requirements may differ in other states. Students should check with the Board of Accountancy in the state where they intend to sit for the examination and apply for certification. The undergraduate accounting curriculum qualifies a student to sit for the examination in Massachusetts. Students who wish to apply for certification in Massachusetts after successful completion of the C.P.A. Examination should take the following courses to fulfill the specific requirements for certification:

At least one course in each area:

Area 1: ACC 331 Fraud Examination

ACC 332 Forensic Accounting

ACC 260 Community Tax Assistance

Area 2: MGT 321 Corporate Governance

ACC 250 Personal Finance

PHI 260 Business Ethics

Any business or economics course not required for the accounting major

### ACCELERATED C.P.A. TRACK M.B.A. PROGRAM

The Accelerated C.P.A. Track M.B.A. program is offered to students who hold an undergraduate degree in Accounting. This program is specifically designed to provide recent graduates the academic and practical experience needed to sit for the CPA exam and pursue careers in public accounting. Students interested in the Accelerated M.B.A. should consult with Prof. Michael Lewis, Director of the M.B.A. program, early in their junior year to plan their course of study and job search activities.

### **MAJOR IN ECONOMICS (11)**

A major in Economics provides students with tools that are helpful in understanding the complex economic forces at work in society. In part, this understanding comes from learning factual information about economic events and institutions. However, economic facts are best viewed through the lens of economic theory, while economic data should be evaluated using careful statistical analysis. The undergraduate major in Economics emphasizes applications of economic theory and analysis to a wide variety of real-world events and arrangements in both the private and public sectors. An Economics major is excellent preparation for direct entry into a career or for graduate work in economics, business, law, public administration, or international affairs. Students considering graduate school in economics are strongly encouraged to complete a minor or second major in mathematics as a strong background in mathematics is required for admittance to such programs. Please consult with the Economics faculty for suggestions on which mathematics electives would be most appropriate. Within economics, there are two possible majors: Economics, and Economics with Business Concentration. Students in both majors are required to complete the seven courses that make up the economics core, plus four to eight additional courses.

### **ECONOMICS CORE (7)**

**ECO 110 Principles of Microeconomics** 

ECO 111 Principles of Macroeconomics

ECO 115 Statistics with Excel

ECO 215 Econometrics I

ECO 310 Microeconomic Theory

ECO 311 Macroeconomic Theory

ECO 499 Senior Research Seminar

### **ECONOMICS ELECTIVES (4)** Any four additional economics courses

Note: Calculus I (MAT 117 or 131) is a prerequisite for ECO 310 Microeconomic Theory. Additional mathematics courses beyond calculus are especially important for students considering graduate school in economics or business. A student who chooses to major in economics while minoring in finance will need to take a total of 14 courses.

### RECOMMENDED FOUR YEAR PLAN FOR THE ECONOMICS MAJOR

The following plan is recommended for economic majors. The major is flexible to accommodate study abroad and students can successfully complete the major with the latest starting point being spring of sophomore year. While not a complete necessity, students should try to complete the first and sophomore year courses by the end of sophomore year.

#### **First Year**

Fall	Spring
ECO 110 Principles of Microeconomics	ECO 111 Principles of Macroeconomics
	MAT 117 or MAT 131 Calculus I

### **Sophomore Year**

Fall	Spring
ECO 115 Statistics with Excel	Economics Elective
	ECO 311 if ECO 110 and ECO 111 are complete

#### **Junior Year**

Fall	Spring
ECO 215 Econometrics	ECO 311 Macroeconomic Theory
ECO 310 Microeconomic Theory	Economics Elective

### **Senior Year**

Fall	Spring
Economics Elective	ECO 499 Research Seminar
Economics Elective	

### ADVISING TIPS FOR THE MAJOR IN ECONOMICS

- ECO 115 is a prerequisite for ECO 215. ECO 115 is offered every semester while ECO 215 is only in the fall.
- Students considering graduate school in economics should take a number of mathematics courses. Please see the economics department chair for details.
- Students who plan to major in economics and minor in finance must take 3 courses in the minor that do not count toward major requirements. Please see the department chair to outline a course plan.
- Students who plan to double major in economics and finance must have 6 unique courses in each of the two majors that do not count towards the other. Please see the department chair to outline a course plan.
- While there is not a course devoted to internships, students may complete an internship for credit that may count as an economics elective.
- Study abroad coursework may count as economic electives with advanced permission.
- Honors students should consider taking electives as early as possible as this will help the thesis topic.

# MAJOR IN ECONOMICS WITH BUSINESS CONCENTRATION (14)

# **ECONOMICS CORE (7)**

**ECO 110 Principles of Microeconomics** 

**ECO 111 Principles of Macroeconomics** 

ECO 115 Statistics with Excel

ECO 215 Econometrics I

ECO 310 Microeconomic Theory

ECO 311 Macroeconomic Theory

ECO 499 Senior Research Seminar

# **BUSINESS CONCENTRATION (4)**

FIN 325 Financial Management I

ACC 125 Financial Accounting

ACC 126 Managerial Accounting

MGT 100 Introduction to Management OR MKT 101 Principles of Marketing

# **ELECTIVES (3)**

Any 3 additional ECO courses numbered 200 or higher

Note: Calculus (MAT 117 or 131) is a prerequisite for ECO 310 Microeconomic Theory. Additional mathematics courses beyond calculus are especially important for students considering graduate school in economics or business.

# RECOMMENDED PLAN FOR THE MAJOR IN ECONOMICS WITH A BUSINESS CONCENTRATION

The following plan is recommended for Economics with a Business Concentration majors. The major is flexible enough to accommodate study abroad and students can successfully complete the major even if they begin working toward it as late as spring of sophomore year.

#### First Year

Fall	Spring
ECO 110 Principles of Microeconomics	ECO 111 Principles of Macroeconomics
	MAT 117 or MAT 131 Calculus I

### **Sophomore Year**

Fall	Spring
ACC 125 Financial Accounting	ACC 126 Managerial Accounting
Economics elective for Business Concentration	MGT 100 or MKT 100
ECO 115 Statistics with Excel	

### **Junior Year**

Fall	Spring
ECO 215 Econometrics	ECO 311 Macroeconomic Theory
ECO 310 Microeconomic Theory	Economics elective for Business Concentration
FIN 325 Financial Management I	

### **Senior Year**

Fall	Spring
Economics elective for Business Concentration	ECO 499 Research Seminar

### ADVISING TIPS FOR THE MAJOR IN ECONOMICS WITH

### A BUSINESS CONCENTRATION

- Students considering graduate school in economics should take a number of mathematics courses. Please see the chair for details.
- While there is no course devoted to internships, students may complete an internship for credit that may count as an economics elective.
- Study abroad coursework may count as economic electives with pre-approval by the chair of the department.

# MINOR IN ECONOMICS (7) REQUIRED COURSES (4)

ECO 110 Principles of Microeconomics

**ECO 111 Principles of Macroeconomics** 

ECO 115 Statistics with Excel

ECO 310 Microeconomic Theory OR ECO 311 Macroeconomic Theory

# **ELECTIVES (3)**

Chosen from among department offerings at the 200 level or above, and selected in consultation with a department member to achieve a particular objective.

Note: Students majoring in Accounting, Finance, Management, Marketing, or International Business typically need to take 3 additional ECO courses beyond those required for the major to complete a minor in economics.

### MINOR IN LAW AND THE ECONOMY (6)

# **REQUIRED COURSES (3)**

ECO 230 Law and Economics (ECO 110 is a pre-requisite)

MGT 215 Business Law

MGT 321 Corporate Governance (ACC 125 and MGT 100 are pre-requisites)

### **ELECTIVES (3)**

ECO 331 Industrial Organization

HIS 309 Diplomatic History of Europe in the 19th Century OR HIS 310: Diplomatic History of Europe in the 20th Century

PHI 270 Philosophy of Law

PHI 290 Property and Civic Life

PHI 320 Business Ethics

POL 316 Constitutional Law

POL 322 Political Economy

POL 321 Public Policy

ENG 201 Argument and Persuasion OR ENG 211: Speech

### **MAJOR IN FINANCE (15)**

A major in finance aims to expose students to financial theory while developing practical skills desired by employers. Through a curriculum that provides students with the decision-making tools used by professionals in the corporate and investment sectors, students develop an understanding of the structure of the financial system and its impact on society.

# **FUNDAMENTALS (5)**

ACC 125 Financial Accounting

ACC 126 Managerial Accounting

ECO 110 Principles of Microeconomics

**ECO 111 Principles of Macroeconomics** 

MGT 100 Introduction to Management

# **QUANTITATIVE SKILLS (3)**

MAT 117 or 131 Calculus

ECO 115 Statistics with Excel

FIN 330 Financial Modelling

# **UPPER LEVEL (4)**

FIN 325 Financial Management I

FIN 326 Financial Management II

FIN 357 Investment Theory

FIN 358 Investment and Securities Valuation

# **ELECTIVES (3)**

At least one (1) must be at the 400 level ECO 215 Econometrics

ECO 329 Monetary and Financial Institutions

ECO 311 Macroeconomic Theory

ECO 354 International Finance

ACC 200 Intermediate Accounting I

ACC 201 Intermediate Accounting II

FIN 410 Cases in Financial Management

FIN 420 Applied Security and Portfolio Analysis

FIN 430 Financial Econometrics

### RECOMMENDED FOUR YEAR PLAN FOR THE FINANCE MAJOR

The following plan is recommended for finance majors. The sequence is slightly flexible. Students should do their best to take ECO 110, ECO 111, ACC 125, ACC 126, MAT 117 and ECO 115 by the middle of their sophomore year, and FIN 325 by the end of their sophomore year. Many courses have prerequisites and will be offered only once a year so planning should be done carefully.

#### **First Year**

Fall	Spring
ECO 110 Principles of Microeconomics	ECO 111 Principles of Macroeconomics
ACC 125 Financial Accounting	ACC 126 Managerial Accounting
Mat 114 or MAT 117 or MAT 131 Calculus I	MAT 117 or MAT 131 Calculus I (if not taken in the fall)

#### **Sophomore Year**

Fall	Spring
ECO 115 Statistics with Excel	FIN 325 Financial Management I
MGT 100 Introduction to Management	

#### **Junior Year**

Fall	Spring
FIN 326 Financial Management II	FIN 330 Financial Modelling
FIN 357 Investment Theory	FIN 358 Investment and Securities Valuation
FIN Elective (can be taken senior year instead)	FIN Elective (can be taken senior year instead)

#### **Senior Year**

400 level FIN (Fall or Spring)
FIN Electives if not taken junior year

### **ADVISING TIPS FOR THE MAJOR IN FINANCE**

- Many courses in the major have prerequisites. Careful planning is needed for the major, especially if a student would like to study abroad.
- The major can be tailored somewhat to a student's interest. Those interested in corporate finance should consider taking accounting
  courses as finance electives and FIN 410 as the capstone; those interested in investments should consider FIN 420 as the capstone;
  and those interested in quantitative analysis should consider taking ECO 215 and FIN 430.
- Students can double major in Economics and Finance or double major in Accounting and Finance by taking 6 courses in each major that do not count towards the other. See the relevant department chair for details.

# **MINOR IN FINANCE (6)**

# **REQUIRED COURSES (3)**

ECO 115 Statistics with Excel
MAT 117 Calculus | OR MAT 131 Calculus |
FIN 325 Financial Management | (ECO 110, ECO 111 and ACC 125 are prerequisites)

# **ELECTIVES (3)**

### At least two (2) must be designated FIN

ECO 329 Monetary and Financial Institutions

ECO 354 International Finance

FIN 326 Financial Management II.

FIN 330 Financial Modeling

FIN 357 Investment Theory

FIN 358 Investment and Securities Valuation

FIN 410 Cases in Financial Management

FIN 420 Applied Security and Portfolio Analysis

FIN 430 Financial Econometrics

Note: ECO 110, ECO 111 and ACC 125 are prerequisites for FIN 325, so students should plan the sequence carefully. ACC 126, while not required, is highly recommended for finance minors.

# COURSE DESCRIPTIONS\_\_\_\_\_

# **ACCOUNTING (ACC)**

### **ACC 125 FINANCIAL ACCOUNTING**

An introduction to accounting concepts for financial reporting. Accounting theories and principles relative to asset valuation, liability reporting, and income determination will be examined. The uses and limitations of external financial reports will be emphasized. (Fall, Spring)

Matraia, Quinn/Three credits

### ACC 126 MANAGERIAL ACCOUNTING

A consideration of some of the more complex areas of financial accounting and an introduction to managerial accounting and its role in the planning and control of business operations. Changes in financial position, analysis of financial statements, cost accounting, and budgeting will be examined. The impact of accounting information on internal decision making will be emphasized. Prerequisite: ACC 125.

Matraia, Quinn/Three credits

### ACC 200 INTERMEDIATE ACCOUNTING I

An intensive study of financial accounting and reporting problems. The class will discuss generally accepted accounting principles as applied to income determination, cash, receivables, investments, inventories, and productive resources. Emphasis is on the theory and practice of providing useful information to external financial statement users. The course will include coverage of the primary differences between U.S. GAAP and International Financial Reporting Standards (IFRS). Prerequisites: ACC 125 and ACC 126. (Fall)

Staff/Three credits

#### **ACC 201 INTERMEDIATE ACCOUNTING II**

A continuation of ACC 200. Discussion focuses on debt and equity capital issues, leases, pensions, earnings per share, income taxes, and cash flow. The course will include coverage of the primary differences between U.S. GAAP and International Financial Reporting Standards (IFRS). Prerequisite: ACC 200. (Spring)

Staff/Three credits

### ACC 210 COST ACCOUNTING

Deals with the processing, reporting, and use of accounting data for managerial decision making. Focuses on the use of cost accounting as a highly developed quantitative device for the selection and achievement of objectives. Emphasis on cost/volume/profit relationships, job-order costing, process costing, activity-based costing, standard costs, budgeting, capital budgeting, and performance evaluation. Prerequisites: ACC 125 and ACC 126.

Staff/Three credits

#### **ACC 211 ACCOUNTING INFORMATION SYSTEMS**

The overall objective of the course is to develop a framework for the analysis and design of accounting information systems. Based on this framework, the objective is then to show the student how to analyze accounting information systems that satisfy the transaction processing, reporting, decision making, and internal control requirements. Prerequisites: ACC 125 and ACC 126.

Staff/Three credits

#### **ACC 250 PERSONAL FINANCE**

This course will examine personal choices and the realization of an individual's financial objectives. Creating an overall personal financial plan is the focus of the course. Money management, investment selection, consumer credit, housing, inflation, income taxes, transportation, insurance, retirement and estate planning are included in the discussion. Students will strive to develop a solid grounding in personal financial management principles. The department encourages enrollment of non-accounting and non-business majors. Prerequisite: Senior standing or instructor's permission. (Spring)

Staff/Three Credits

### **ACC 310 FEDERAL INCOME TAXES**

The course will focus on the Federal Internal Revenue Code, its origins, organizations, principles, and application. The emphasis will be on the tax consequences of decisions made by both individuals and corporations. Specific practical problems will be used to illustrate the application of many of the basic principles of taxation. Consideration will be given to the historic, economic, and social causes and effects of tax law. Prerequisite: ACC 201 or permission of instructor. (Fall)

Staff/Three credits

#### **ACC 320 ADVANCED ACCOUNTING**

This course concentrates on advanced applications of financial accounting concepts not considered in depth in previous courses. Topics covered may include partnership organization, operation, and liquidation; business combinations; special financial reporting issues, governmental and non-profit accounting; Securities and Exchange Commission requirements; and financial reporting by multinational companies. The objective of the course is to expand and refine the problem-solving techniques introduced in ACC 200–201. Prerequisites: ACC 200 and ACC 201. (Spring) Matraia/*Three credits* 

### **ACC 331 FRAUD EXAMINATION**

This course examines the subject of fraud from both management and accounting perspectives. Utilizing a variety of techniques including text, lecture, case studies, and occasional training videos, the course seeks to familiarize students with the conditions which facilitate fraud, the profile of the fraud perpetrator, common types of fraud, and methods of prevention, detection, and resolution. Numerous historical cases of fraud are examined. Prerequisites: ACC 125 and ACC 126, MGT 100. (Fall)

Staff/Three credits

Staff/Three credits

### **ACC 332 FORENSIC ACCOUNTING**

This course serves as a follow-on to Fraud Examination, ACC/MGT 331, and builds upon the concepts learned in that course. The course covers the role of the forensic accountant including common types of engagements performed. It includes discussion of specific types of occupational and management fraud in depth with emphasis on detection techniques. There is coverage of the structure of forensic financial investigations, including those related to business frauds, business valuations, and matrimonial settlements. Cases from the text and other sources are used to illustrate key concepts. Prerequisite: ACC/MGT 331. (Spring)

### **ACC 385 INDEPENDENT STUDY IN ACCOUNTING**

Open to highly qualified junior and senior majors. Permission of the department chair is required. Staff/*Three credits* 

### ACC 395 SPECIAL TOPICS IN ACCOUNTING

This course permits the study of selected topics as designate by the instructor. Topics will change each time the course is offered. Staff/*Three credits* 

### ACC 420 AUDITING

An examination of the theory and practice of auditing. Emphasis is on generally accepted auditing standards, professional liability of auditors, ethics of the accounting profession, the structure and conduct of the audit, and the preparation of the auditor's report. Prerequisites: Senior

standing and ACC 200 and ACC 201. (Fall)

Matraia/May be taken without Lab for three credits or with Lab for four credits

### **ACC 260 COMMUNITY TAX ASSISTANCE (CSL)**

This course combines the study of low-income taxpayers with community service-learning. Students examine sociological issues, such as social class, in addition to researching individual tax credits targeted at low-income taxpayers. They will also become proficient with tax software. Students will apply their learning through the electronic preparation of tax returns for low-income Worcester residents. (Spring) Staff/Three credits

### **ECONOMICS (ECO)**

#### ECO 110 PRINCIPLES OF MICROECONOMICS

An examination of the basic theory and performance of the household, business, and government in determining the nature of the output of the economy and its distribution among the members of the society. Policy issues considered may include public control of business, labor unions, agriculture, the environment, income distribution and poverty, and international trade. This course fulfills a Foundations Program requirement. Prerequisite: MAT 111 or placement at MAT 114 or higher. (Fall, Spring)

Staff/Three credits

### **ECO 111 PRINCIPLES OF MACROECONOMICS**

An analysis of the basic theory of aggregate economic activity and the application of the theory to current policy problems. Topics include national income accounting, the determinants of the level of income and employment, money and banking, fiscal and monetary policies, and economic growth and stability. Prerequisite: ECO 110. (Fall, Spring)

Staff/Three credits

### **ECO 115 STATISTICS WITH EXCEL**

The purpose of this course is to develop an understanding of how statistical inferences are made in the face of uncertainty, using Excel as a tool. The underlying role of probability is stressed. A secondary purpose is the application of various test designs to formulate research questions. These designs include: t tests, analysis of variance, chi square analysis, and linear regression. An asynchronous, online laboratory component covers the basic tools of Microsoft Excel. Students will learn to create worksheets, enter and move data, format cells and worksheets, apply functions, write formulas, and create effective charts and graphs. MAT 114 must be taken prior to or at the same time as ECO 115. (Fall, Spring) Fahy, Kantarelis, Volz, Wu/Four credits

### ECO 210 ECONOMICS OF WOMEN, MEN, AND WORK

This course examines the work of women and men in the home and in the labor market. Economic decisions within the family are examined including the division of labor and the decision to engage in market work. Topics include: a historical perspective on women's emergence in the workplace; comparative advantage within families; the effects of consumerism; and international comparisons. This is followed by an investigation into the underlying causes of the gender wage gap and the degree of poverty among women. The effects of government and business policies such as family leave, social security, affirmative action and social programs are discussed throughout. Prerequisite: ECO 110. (Alternate years)

Fahy/Three Credits

### ECO 212 ECONOMICS OF THE PUBLIC SECTOR

Micro-economic and macro-economic theory is applied in an analysis of the role of the public sector in the United States economy. Following a consideration of the institutional arrangements that determine the magnitude of local, state, and federal taxes and expenditures, micro-theory is applied to the analysis of the impact of public finance on private sector behavior. Prerequisites: ECO 110 and ECO 111. (Alternate years) Fahy, Volz/Three credits

### **ECO 215 ECONOMETRICS I**

This course is about the construction of hypotheses and the specification of statistical methodology for testing those hypotheses. Students will learn estimation of parameters and inferential analysis, and how to apply these concepts to forecasting and policy. The course starts with the multiple linear regression model, after the properties of the ordinary least-squares estimator are studied in detail and a number of tests

developed, it continues with specification, multicollinearity, autocorellation, heteroskedasticity, and dummy variables. Prerequisites: ECO 115 or SOC 300 or PSY 224; and MAT 117 or MAT 131; (Fall)

Fahy, Kantarelis, Volz/Three credits

#### **ECO 216 SPORTS DATA ANALYSIS**

The primary purpose of this course is to provide students with hands on experience analyzing large data sets from the sports industry. In addition to applying econometric analysis to sports data, students will also be introduced to measures of productivity and value currently being utilized within the sports industry. Students will use appropriate data analysis software to calculate traditional and emerging sports statistics and to analyze relationships between variables using regression analysis. Additionally, students will be introduced to data envelopment analysis as a measure of efficiency. Prerequisite: ECO 215. (Spring, alternate years)

Volz/Three credits

#### **ECO 230 LAW AND ECONOMICS**

The objective of the course is to show how economic thinking may facilitate legal thinking in its attempt to "create" efficient legal rules. After an overview of micro-economics and legal institutions, the course turns to the economics of the principal areas of the common and criminal laws. More specifically, it deals with the existing economic theories of property, contracts, torts, crime, and their applications. Prerequisites: ECO 110 and ECO 111. (Alternate Years)

Kantarelis/Three credits

#### **ECO 235 ENVIRONMENTAL ECONOMICS**

The course examines the relationship between the environment, markets, and business organizations. After an overview of the economics of the environment, it focuses on (among other topics) property rights; externalities; human population problems; the allocation of depletable, renewable, and other resources; cost-benefit analysis; regulation and taxation; and the trading of pollution rights. Prerequisite: ECO 110. (Alternate Years)

Kantarelis, White/Three credits

### **ECO 250 SPECIAL TOPICS IN ECONOMICS**

Special topics in Economics are offered occasionally. These courses expand our current offerings and respond to changing student concerns, interests or more general worldwide topics of importance. These courses can be interdisciplinary in nature. They will be taught at the intermediate level. Some may require prerequisites or could be restrictive in some other manner.

### **ECO 252 ECONOMIC DEVELOPMENT**

Staff/Three credits

Problems encountered by less developed countries. Theories of development are presented, followed by problems of capital accumulation; resource and population issues; strategies for agricultural and industrial development; government's role; and relationships between developing and developed economies. Prerequisites: ECO 110. (Alternate Years)

Rao/Three credits

### **ECO 264 COMPARATIVE ECONOMIC SYSTEMS**

This course is an in-depth, comparative study of the rising economic powers of Asia and/or Central and Eastern Europe. Countries selected for study may include, among others, China, India, Russia and Poland. It examines such areas as transfer of firm ownership from the state to private investors, removal of price controls, macroeconomic stabilization, and the international economic relations of these countries, particularly their relationship with and impact upon the United States economy. Prerequisites: ECO 110. (Alternate Years)

### **ECO 310 MICROECONOMIC THEORY**

The primary purpose of this course is to develop the ability to analyze the economic behavior of individuals, businesses, and government, in the light of economic principles. Topics include consumer theory, production and costs, various market structures and related models, and welfare considerations. Should be taken before senior year. Prerequisites: ECO 110–111, MAT 117 or 131. (Fall)

Fahy, Kantarelis, Rao/*Three credits* 

#### **ECO 311 MACROECONOMIC THEORY**

The modern theory of aggregate economic behavior is considered through development of comparative static models that include the principal aggregate variables associated with determination of output, employment and prices. The problems of economic growth are introduced by using a limited number of the basic dynamic models. Should be taken before senior year. Prerequisites: ECO 110 and ECO 111. (Spring) White/Three credits

#### **ECO 323 LABOR ECONOMICS**

This course applies economic theory to labor market issues. It makes use of the analytical tools of micro- and macro-economics in an examination of productivity, pricing, and allocation of labor resources. Public policy issues are covered including discrimination, manpower development, income maintenance programs, collective bargaining, and unemployment. Prerequisites: ECO 110 and ECO 111. (Alternate Years) Volz/Three credits

#### **ECO 329 MONETARY AND FINANCIAL INSTITUTIONS**

A study of the role of money and monetary institutions in the economy. A parallel development of the monetary theory and institutions that determine public monetary policy and its influence on domestic and international economic activity. Prerequisites: ECO 110–111. (Alternate Years)

White/Three credits

#### **ECO 331 INDUSTRIAL ORGANIZATION**

The course is concerned with the organization of industries in a market environment. It focuses on the market structure, conduct, and performance of industries in the USA. In addition, attention is given to antitrust policy regarding price-fixing agreements, control of market structures, and restrictions on conduct. Prerequisites: ECO 110 and ECO 111. (Alternate Years)

Fahy, Kantarelis, Volz/Three credits

#### **ECO 340 THE ECONOMICS OF SPORTS**

This course applies economic modeling to a number of issues surrounding professional and University sports in the United States. Market structure and game theory will be used to analyze the decision making process for the owners of professional sports teams. Public financing issues are addressed in the context of the funding of stadiums and arenas. A number of labor market topics will be examined including monopsony, labor unions and the economics of discrimination. Finally, collusion, game theory and human capital investment are examined in the context of University sports. Prerequisites: ECO 110 and ECO 115. (May be taken with ECO 115) (Alternate Years) Fahy, Volz/Three credits

### **ECO 353 INTERNATIONAL TRADE**

An examination of the theory of international trade and policies followed by governments with respect to trade of goods and services among countries. Theory examines the gains from trade under classical and modern assumptions, and the impact of various measures used by governments to either restrict or promote trade. Policy analysis focuses on U.S. trade policies and the role of the World Trade Organization. Current topics include trade and the environment, NAFTA, U.S.-China trade, and others as appropriate. Prerequisites: ECO 110 and Junior/Senior standing. (Alternate Years) Kantarelis, Rao/Three credits

### **ECO 354 INTERNATIONAL FINANCE**

This course covers open economy macroeconomics. Topics include: balance of payments accounting, exchange rate determination, monetary and fiscal policy, and macroeconomic modeling. After examining standard theories and models, the course will explore case studies from recent history in numerous countries. The case studies will focus on: debt and balance of payments crises, speculative currency attacks, European monetary union, International Monetary Fund policy, and the value of the U.S. dollar. Students will engage in research projects. Prerequisites: ECO 110 and ECO 111 and Junior/Senior standing. (Alternate Years)

Kantarelis, Rao/Three credits

### **ECO 399 INDEPENDENT STUDY IN ECONOMICS**

Individually supervised study with one or more professors on an advanced topic. Open to qualified juniors and seniors with the permission of the Chair. (Fall/Spring)

Staff/Three credits

#### **ECO 499 RESEARCH SEMINAR**

Required of all Economics majors in their final semester. Course theme is chosen by the instructor. Research projects will be planned and carried out by students under faculty guidance. Seminar meetings provide the opportunity for discussions of students' research and what it means to be an economist in today's world. Useful for seniors in other social sciences and business studies. (Spring)

Staff/Three credit

### **FINANCE (FIN)**

#### **FIN 325 FINANCIAL MANAGEMENT I**

Introduction to the principles and techniques utilized in the financial management of business. Topics to be covered include interpretation of financial statements, time value of money, stock and bond valuation, ratio analysis, risk and return, capital budgeting, cost of capital, leverage, and capital structure. Prerequisites: ECO 110, ECO 111, ACC 125. (Fall, Spring)

Fahy, Volz, White/Three credits

### FIN 326 FINANCIAL MANAGEMENT II

A continuation of FIN 325 with a focus on both long-term and short-term financial planning and management. Topics will include cost of capital, financial leverage, capital structure, dividend policy, working capital management, and international corporate finance. Prerequisite: FIN 325. (Fall)

Wu/ Three credits.

#### **FIN 330 FINANCIAL MODELLING**

In this course students develop the ability to construct financial models in order to answer complex financial questions. Students will learn how to access financial data and how to use that data to complete analyses using a variety of tools. Microsoft Excel will be utilized to format data, perform numerical analysis, and generate graphical presentations of data. Financial topics that will be addressed include discounted cash-flow analysis, capital budgeting, the cost of capital, risk, and financial planning and forecasting. Prerequisites: FIN 325, ECO 115. (Spring) Staff/ Three credits

### **FIN 357 INVESTMENT THEORY**

An examination of investment decision making using economic analysis. Topics include types of investments; investment objectives; investment return and risk; security analysis; portfolio theory; the efficient market hypothesis; fundamental analysis; technical analysis; the capital asset pricing model; and other topics to be chosen by the instructor. Prerequisites: ECO 110 and ECO 111, ECO 115, MAT 117 or MAT 131 (Fall) Kantarelis, White/Three credits

### **FIN 358 INVESTMENTS AND SECURITY VALUATION**

This course examines the various techniques used by investment professionals to value debt and equity securities of public and private companies. Stock valuation methods that will be covered include the dividend discount model, the price-earnings ratio, and financial statement analysis. Bond valuation will focus on pricing, risk, and portfolio management. Measuring the value of derivative securities such as options and futures will also be discussed. Prerequisites: FIN 325 and FIN 357. (Spring)

Wu/ Three credits

### **FIN 410 CASES IN FINANCIAL MANAGEMENT**

This course focuses on financial concepts, tools and techniques and their impact on the firm through an examination of case studies. Students utilize material from previous finance courses to assess options and offer recommendations for a variety of realistic case-based problems involving financial decision-making. Topics covered include ethical decision making in finance, financial analysis, forecasting, estimating cost of capital, capital budgeting and resource allocation, management of the firm's equity through dividends and share repurchases, assessment of corporate capital structure, and working capital management. Emphasis is on identifying problems, developing solutions, and presenting cases in an effective and professional manner. Prerequisites: FIN 325, FIN 326. (Spring)

Wu/ Three credits

### FIN 420 APPLIED SECURITY AND PORTFOLIO ANALYISIS

The course builds on the knowledge gained from the core course FIN 358: Investment and Securities Valuation. It will help students develop a broad knowledge and understanding of issues relevant to portfolio management practice. Through the combination of theory and practical

cases, students will learn Investment Policy Statement for individual and institution investors, process and strategies of portfolio optimization, portfolio performance evaluation, and portfolio rebalancing. Prerequisites: FIN 357 and FIN 358. (Fall)

Wu/ Three credits

### **FIN 430 FINANCIAL ECONOMETRICS**

The course is about analyzing prices of financial assets traded in competitive markets through econometric methods; it utilizes concepts from microeconomics, finance, mathematical optimization, data analysis, probability models and statistical analysis. After an overview of multiple regression, dummy variables and panel data, the course focuses on methodologies in modeling and testing time series data (analysis of data sets that change over a time period): Cointegration, Autoregressive Integrated Moving Average (ARIMA) models, Generalized Autoregressive Conditional Heteroskedasticity (GARCH), Granger Causality, Event Study, and Monte Carlo analysis. The last portion of the course is spent on studying classic applications found in literature and on applied work undertaken by students on various topics of their choice. Familiarity with econometric software will be essential as assignments will have to be carried out using standard packages such as Excel and STATA. Prerequisite: ECO 215. (Spring)

Kantarelis/ Three credits