

**ECONOMICS, FINANCE, AND DECISION SCIENCES**

Acting Chair: Cliff Mensah

Mohammad Ashraf <sup>1</sup>	Victor Bahhouth	James R. Frederick
David O. Fricke	Lydia Gan	Rebecca Gonzalez
Zhixin (Richard) Kang	Ramin Cooper Maysami <sup>2</sup>	Wikrom Prombutr
Yan Shi		

<sup>1</sup>Director of Economic and Business Research<sup>2</sup>Acting Dean, School of Business

The Department of Economics, Finance, and Decision Sciences contributes to a business education that establishes a foundation for successful, principled, and ethical professional careers in both regional and global environments.

Classes offered by the Department of Economics, Finance, and Decision Sciences are not only integral to the Bachelor of Science Degrees offered by the School of Business, but also contribute to the general education mission of the University in “graduating students with broad vision who recognize the complexity of social problems.”

The Department values intellectual curiosity and actively promotes creative thinking among students, and encourages undergraduate research. The Department houses highly qualified international faculty holding Ph.D.s from some of the most respected universities in the United States. Faculty members participate in a balanced and eclectic program of research-enhanced teaching and have published in reputable international journals.

The Economics Track within the Bachelor of Business Administration prepares students for a variety of careers in the government or business sectors, and job opportunities abound in economic consulting and research. Corporate jobs concerned with practical applications of economic policy and microeconomic forecasting are also routinely available.

The Finance Track offers proficiencies and research capabilities needed for careers in the banking and insurance sectors and in securities markets, as well as careers as financial managers, financial analysts, and personal financial advisors.

Both tracks offer equip students with means of success in pursuing graduate degrees. The Economics and Finance tracks are available for traditional (face-to-face) and fully online modes of delivery.

The Department of Economics, Finance, and Decision Sciences offers minors in Economics, Finance, and Quantitative Finance for non-Business majors.

**BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION**

<b>Requirements for a Bachelor of Science in Business Administration</b>	<b>Sem. Hrs.</b>
Freshman Seminar	1
General Education, including: MAT 1070 and 2150 or 2210, ECN 2020, 2030	44
BSBA Common Body of Knowledge	45
DSC 2090, BLAW 2150; ACC 2270, 2280; DSC 3130, 3140; MGT 3030, 3060; MKT 3120, FIN 3100; ECN 3010 or ECN/ FIN 3040; ITM 3010; MGT 4410, 4660; and ONE of the following six courses: BLAW 3160, ECN 2410, ECN 4400, FIN 4210, MGT 3150, or MKT 3130*	
Track (see below): choose one—Economics, Finance	12
Business Electives (3000 or 4000 level)	6
General Electives	12
<b>Total:</b>	<b>120</b>

\*A study-abroad program approved by the department chair and the dean/assistant dean may replace this requirement.

**Tracks:** select one

**Economics Track\*** (12 hours): ECN 3010\*\*, 3050, and two additional 3000- or 4000-level economics courses (ECN or ECNS)

\*In addition to the University graduation requirements, all B.S. in Business Administration–Economics Track majors must attain an overall 2.00 QPA in the 12 semester hours listed above to fulfill the economics track.

\*\*ECN 3010 cannot be taken as part of the BSBA Common Body of Knowledge

**Finance Track\*** (12 hours): FIN 3040,\*\* 4100, 4180, and one additional 3000- or 4000-level finance course (FIN or FINS)

\*In addition to the University graduation requirements, all B.S. in Business Administration–Finance Track majors must attain an overall 2.00 QPA in the 12 semester hours listed above to fulfill the finance track.

\*\*ECN 3040/FIN 3040 cannot be taken as part of the BSBA Common Body of Knowledge

## MINORS (for non-Business majors only)

### Requirements for a Minor in Economics

Required Courses: ECN 2020 and 2030

Choose four courses from among the 3000- and 4000-level economics courses (ECN or ECNS) offered by the department\*.

**Sem. Hrs.**

6

12

**Total: 18**

\*FIN 3040 can be substituted for ECN 3040; there are other prerequisites, in addition to ECN 2020 and 2030, for ECN 3010, ECN 3040, and FIN 3040

### Requirements for a Minor in Finance

Required Courses: ECN 2030; DSC 1590 or 2090; FIN 2050, 2400, 3000, and 3210

**Sem. Hrs.**

18

**Total: 18**

### Requirements for a Minor in Quantitative Finance

Required Courses: ECN 2030; MAT 2150 or 2210; DSC 1590 or 2090; DSC 3130 or MAT 2100; FIN 3000, 3040\*, and 3210

**Sem. Hrs.**

22

**Total: 22**

\*FIN 3040 can be substituted for ECN 3040

## COURSES

### DECISION SCIENCES (DSC)

#### DSC 1590. Technology-Enabled Decision Making

This course introduces pertinent elements of computer applications as they relate to making informed decisions. New and emerging learning technologies are introduced and employed to accentuate critical thinking and problem solving skills. Additionally, the course emphasizes effective communication and collaboration in a technology-rich learning environment. Excel spreadsheets are introduced and utilized extensively in this course. Other techniques taught include collection, analysis, interpretation, and presentation of data as well as the effective use of Internet search tools and electronic databases. Credit, 3 semester hours.

#### DSC 2090. Spreadsheet and Database Management

A comprehensive advanced-level course in spreadsheet analysis and database management. The focal point in this course will be on the use of spreadsheet analysis and database management to address contemporary business problems. Credit, 3 semester hours. PREREQ: DSC 1090.

**DSC 3130. Business Statistics I**

A study of descriptive statistics including functional and summation notation, describing data graphically and numerically, and probability distributions. Credit, 3 semester hours. PREREQ: C or better in MAT 1070 or a higher-level mathematics class.

**DSC 3140. Business Statistics II**

A study of statistical inference including probability theory, random variables and probability distributions, testing hypotheses, estimating unknown parameters, analysis of variance, and linear and multiple regression. Credit, 3 semester hours. PREREQ: A “C” or better in DSC 3130.

**DSC 3650. Management Science**

The mathematical concepts application to the solution of management problems. Topics include linear programming, decision theory, optimization, queuing theory, and transportation modeling. Credit, 3 semester hours. PREREQ: DSC 3140, MGT 3060.

**DSC 4420. Supply Chain Management (MGT 4420)**

Introduces students to new and emerging topics, tools, and techniques in operations and supply chain management. The course emphasizes coordination, integration, and decision making regarding the interaction of the firm with its suppliers and customers, where planning, design, and control of all aspects of supply chains including design and control of material and information systems, supplier development, supplier selection, customer relationship management and quality issues such as outsourcing in supply chain are discussed. Credit, 3 semester hours. PREREQ: ECN 2020 and 2030, DSC 3130, MAT 1070, ITM 3010.

**DSC 4990. Directed Studies in Decision Sciences**

Independent study in an area of decision sciences of particular interest to a student under the direction of one or more faculty members. Students must submit detailed proposals for a directed study, detailing the proposed plan of study, research involved, dates for deliverables, final product to be produced, and faculty who will be supervising. Proposals will be reviewed by a faculty committee to determine acceptance of the proposal. Credit, 1-3 semester hours. PREREQ: DSC 2090, DSC 3130.

**DSCS 4XXX: Special Topics in Decision Sciences**

The study of a particular topic of special importance, relevance, and currency in the broad field of decision sciences. The content of the special topics course varies with each offering. Course may be repeated as long as topic being studied is different. Credit, 3 semester hours. PREREQ: DSC 2090, 3130.

**ECONOMICS (ECN)****ECN 1000. Economics of Social Issues**

Economic thinking applied to persistent economic problems and issues in a market economy. Emphasis on implications for government policy rather than on the underlying theory. Topics include the nature of an economic system, demand and supply, monopolies, pollution and public goods, ethics and law, unemployment, inflation, the Federal Reserve System and money. Credit, 3 semester hours.

**ECN 2020. Principles of Microeconomics**

This course focuses on the individual decisions in the market economy. After an overview of how a market economy works, the course develops theories of consumer behavior, the behavior of firms in various degrees of competition, and workers' decision to offer labor. Government regulation of markets is also examined. Credit: 3 semester hours.

**ECN 2030. Principles of Macroeconomics**

This course offers an overall picture of the operation of our economy. The course focuses on how the economic system determines the level of national income, the unemployment rate, and the rate of inflation. Fiscal, monetary, and supply-side policies are discussed. Credit: 3 semester hours.

**ECN 2060. Economic Geography (GGY 2060)**

Geographic analysis of the location, development and distribution of major industries, resources, agricultural products, and economic services. Study of economic development problems and prospects. Credit, 3 semester hours.

**ECN 2410. Asian Economies**

This is an introductory level course focusing on the economic systems of Asian countries, which despite diverse history, culture, politics, and society have demonstrated one similarity: rapid economic growth. The course reviews patterns of economic growth among Asian countries, highlighting institutional differences within Asia and between Asian countries and the United States, and studying the global consequences of Asian economic expansion. Countries discussed will be selected from the Middle East, the Indian subcontinent, and Southeast and North Asia. China and Japan will be discussed in depth. Particular attention is paid to successes and failures of government policies in promoting economic growth in the region, and the role of culture in shaping such policies. Economic theories such as comparative advantage and growth models will be utilized to analyze the reasons for success of certain countries and the stagnation of others. The role of the market system as well as cultural and legal factors will be studied in addressing the similarities and differences among such economies. Credit, 3 semester hours.

**ECN 3010. Managerial Economics**

This course is a rigorous analysis of resource allocation, price determination in a market economy, consumer behavior (constrained utility maximization), theory of the firm (constrained profit maximization), and production and pricing behavior under various market structures. Credit, 3 semester hours. PREREQ: A "C" or better in MAT 2150 or 2210 and in ECN 2020.

**ECN 3040. Money, Financial Markets, and Institutions (FIN 3040)**

Study of money, financial institutions, and markets and their roles in the economy. Coverage includes organization and functions of financial intermediaries, structure of financial markets and financial instruments, application of time value of money to bond pricing and yield calculations, algebraic approach to the supply and demand for money and interest rate determination, term- and risk structures of interest rates, the Keynesian macroeconomic model, and the algebraic approach to analyzing the effects of money and credit on national incomes, prices, and interest rates. While this course is substantially the same as FIN 3040 and covers the same set of topics, it places more emphasis on policy-oriented macroeconomic analysis. Credit, 3 semester hours. PREREQ: A "C" or better in MAT 2150 or 2210 and in ECN 2030.

**ECN 3050. Intermediate Macroeconomics**

This course builds upon the concepts learned in Principles of Macroeconomics. It provides a deeper understanding of the functioning of the macroeconomy and the forces of globalization. Students will learn two major macroeconomic models: the neoclassical model and the Keynesian model. Topics will include national income and its determinants, economic fluctuation and economic growth, the possible impacts of monetary and fiscal policies, and how different factors of production behave in certain economic situations. Furthermore, how changes in aggregate consumption and investment affect the economy will also be covered. Credit, 3 semester hours. PREREQ: A "C" or better in MAT 2150 or 2210 and in ECN 2030.

**ECN 3070. Internet Economics**

Applying basic principles of economics, this course surveys the various ways that economics is applied to the area of electronic commerce and how the e-commerce revolution affects the economy. The course covers relevant applications of electronic commerce to emerging economic concepts such as virtual products, network industries, online pricing and advertising, vertical integration/vertical restraint in the online market, Internet intellectual property rights, anti-trust issues in e-commerce, online financial markets, online banking, digital cash and electronic payments, regulatory issues of

online markets, the public sector and the online marketplace, Internet and security. It provides balanced examinations of how basic economic principles continue to [word(s) omitted here??] the electronic marketplace and of how features of certain products sold in this market place required rethinking some of those principles. Credit, 3 semester hours. PREREQ: ECN 2020.

**ECN 3080. Environmental Economics**

This course examines the implications of economic theory and how it relates to the environment and environmental activity. The continuing conflict between market forces and environmental integrity will be the centerpiece of discussion, and the course will explain how economic theory views the relationship between economic activity and the natural world. Special emphasis is given to developing and implementing tools to evaluate environmental policies. Other topics include cost-benefit analysis, measurement of the benefits of non-market goods and costs of regulations, and the evaluation of the impact of regulations in areas such as financial markets, workplace health and safety, consumer product safety, and other contexts. Credit, 3 semester hours. PREREQ: ECN 2020.

**ECN 3090. Economics of Sports**

This course centers around the application of microeconomic theory to the sports industry, both at the professional and amateur sports markets. The topics include market structure, labor relations, labor market discrimination, competitive balance, market value of sports talent, and payments to players. The involvement of the government in the sports business will also be discussed. Credit, 3 semester hours. PREREQ: ECN 2020.

**ECN 3300. Public Finance (PSPA 3310)**

A descriptive and analytical study of government revenues and government expenditures. Includes federal, state, and local levels of government. Credit, 3 sem. hours. PREREQ: ECN 2020 or 2030.

**ECN 3410. U. S. Economic History (HST 3410)**

A study of the United States economy from colonization to the present. Credit, 3 semester hours. PREREQ: Permission of instructor.

**ECN 3500. Survey of Ethics in Economics and Finance (FIN 3500)**

A survey of the emerging field of Financial Ethics. This course will provide an overview of ethical theory and decision making, explore some of the possible sources of ethical conflicts in economics and finance, study the practice of ethical decision making in the fields of finance and economics, and employ case studies to practice methods for determining ethical decision making in financial management, investments, and financial institutions. Credit, 3 semester hours.

**ECN 3740. Health Economics**

This course will present an economic analysis of several aspects of the healthcare industry, including hospital services, physicians' services, nurses' services, the pharmaceutical industry, medical insurance, Medicare and Medicaid, HMOs and PPOs, medical tourism, and government healthcare policy. Credit, 3 semester hours. PREREQ: ECN 2020.

**ECN 4060. Comparative Economic Systems**

A comparative study of alternative economic systems, including communism, socialism, and capitalism. Credit, 3 semester hours. PREREQ: ECN 2020, ECN 2030.

**ECN 4070. Labor Economics**

Examines the nature of the labor markets and problems dealing with labor groups. Topics include history of the labor movement, union structure, labor law, collective bargaining. Credit, 3 semester hours. PREREQ: ECN 2020, ECN 2030.

**ECN 4080. Economic Development**

Analysis of economic and social problems of underdeveloped regions. Theories and strategies of economic growth and development designed to accelerate solutions to these problems. Credit, 3 semester hours. PREREQ: ECN 2020, ECN 2030.

**ECN 4110. Development of Economic Thought**

A basic course in the development of economic theories and doctrines, from the ancient Greeks to the present day. Credit, 3 semester hours. PREREQ: ECN 2020, ECN 2030.

**ECN 4400. International Trade**

An introductory analysis of international trade relations, the nature of a country's imports and exports, costs and benefits of trade protectionism, the role of trade in the domestic economy, balance of payments, and the determination of exchange rates. Credit, 3 semester hours. PREREQ: ECN 2020, ECN 2030.

**ECN 4990. Directed Studies in Economics**

Independent study in an area of economics of particular interest to a student under the direction of one or more faculty members. Students must submit detailed proposals for a directed study, detailing the proposed plan of study, research involved, dates for deliverables, final product to be produced and faculty who will be supervising. Proposals will be reviewed by a faculty committee to determine acceptance of the proposal. Credit, 1-3 semester hours. PREREQ: ECN 2020, ECN 2030, and permission of the Department.

**ECNS 4xxx. Special Topics in Economics**

The study of a particular topic of special importance, relevance, and currency in the field of economics. The content of the special topics course varies with each offering. Course may be repeated as long as topic being studied is different. Credit, 3 semester hours. PREREQ: ECN 2020, ECN 2030.

**FINANCE (FIN)****FIN 2050. Personal Finance**

Course focuses on tools consumers can use in making purchase decisions. Topics include planning and managing personal finances, credit, insurance, real estate, financial investments, retirement planning and estate planning. Credit, 3 semester hours.

**FIN 2400. Foundations of Finance (for Non-Business Majors)**

Foundations of Finance offers a concise yet comprehensive survey approach to finance that provides students with the opportunity to understand what finance is all about. The course, intended for non-business majors, introduces the three main areas of finance—markets, investments, and financial management. Topics include banks and financial institutions, interest rate and the saving process, time value of money, introduction to bonds and stocks, financial data analysis and long term financial planning, and overview of capital budgeting. MAT 1050 and a financial calculator are recommended. Credit, 3 semester hours.

**FIN 3000. Finance for Small and Entrepreneurial Businesses**

Small Business and Entrepreneurial Finance takes a three-pronged stage-sensitive approach to introduce financial thinking, tools, and techniques adapted to the realm of entrepreneurship and small business ownership. The course emphasizes the differences between large corporations and Small and Medium Enterprises (SMEs) relative to funding, risk assessment, and management. Topics include introduction to financial tools, financial markets and instruments, and management of short terms assets and liabilities. Analysis of bootstrapping strategies in estimating financial resource requirement is followed by a comprehensive discussion of sources of funds for small businesses in the development, startup, and survival stages of the entity's life cycle (including Small Business Administration programs), and in later stages of life, entrepreneurial venture growth capital, harvesting the venture investment and turnaround opportunities or liquidation under financial distress. Credit, 3 semester hours.

**FIN 3040. Money, Financial Markets, and Institutions (ECN 3040)**

Study of money, financial institutions and markets and their roles in the economy. Coverage includes organization and functions of financial intermediaries, structure of financial markets and financial

instruments, application of time value of money to bond pricing and yield calculations, algebraic approach to the supply and demand for money and interest rate determination, term- and risk structures of interest rates, the Keynesian macroeconomic model, and the algebraic approach to analyzing the effects of money and credit on national income, prices, and interest rates. While this course is substantially the same as ECN 3040 and covers the same set of topics, it places more emphasis on the structure and functions of financial institutions and instruments and the role they play in guiding resources within the economy. Credit, 3 semester hours. PREREQ: A “C” or better in MAT 2150 or 2210 and in ECN 2030.

### **FIN 3050. Risk Management and Insurance**

This course provides for the future business manager an introduction to the nature and management of risk. Theory and application into the nature of risk, exposure, insurance, and hedging are covered. Insurance is covered from the point of view of the business person, to be a smart consumer of insurance services; as well as from the point of view of a potential insurance industry representative or executive. Credit, 3 semester hours. PREREQ: FIN 3100, DSC 3130.

### **FIN 3100. Business Finance**

Principles of financial management as they apply to American business organizations. The role of finance and the financial manager, risk, return and interest rates, long-term investment decisions, cost of capital, and short and long term financing decisions. Credit, 3 semester hours. PREREQ: A “C” or better in ACC 2280, DSC 3130 or equivalent statistical course, and MAT 1070 or a higher-level mathematics class.

### **FIN 3210. Financial Analysis with Spreadsheet Applications**

FIN 3210 employs spreadsheets as a management tool for financial analysis by taking an integrative view that promotes integration across financial functions and responsibilities within a business. Topics include analyzing income statements, balance sheets, and cash flow statements, performing vertical and horizontal analyses of financial statements, determining financial ratios and analyzing their trends and significance, and combining quantitative and judgmental techniques to improve forecasts of sales revenues and customer demands. Spreadsheet software will be used in the course as an analytical tool. Credit, 3 semester hours. PREREQ: DSC 1590 or DSC 2090 and FIN 3000.

### **FIN 3500. Survey of Ethics in Economics and Finance (ECN 3500)**

A survey of the emerging field of Financial Ethics. This course will provide an overview of ethical theory and decision making, explore some of the possible sources of ethical conflicts in economics and finance, study the practice of ethical decision making in the fields of finance and economics, and employ case studies to practice methods for determining ethical decision making in financial management, investments, and financial institutions. Credit, 3 semester hours.

### **FIN 4100. Financial Management**

Finance from the viewpoint of the financial manager. This course introduces and utilizes the case study method to explore differences in financial policy, financial statements for ratio analysis, capital budgeting investment decisions, and strategic bond and stock valuations. Credit, 3 semester hours. PREREQ: A “C” or better in FIN 3100.

### **FIN 4180. Investment Analysis and Portfolio Management**

Equity and debt securities as investments, the organization and functions of the capital market, and the analysis and evaluation of securities and portfolios. Credit, 3 semester hours. PREREQ: A “C” or better in FIN 3100.

### **FIN 4200. Bank Management and Policy**

Course focuses on the theory and practice of management of commercial banks and other depository institutions. Primary emphasis is on the application of concepts and analytical tools crucial to decisions facing managers of contemporary banks. Areas covered include financial and portfolio manage-

ment, deposit acquisitions, capital adequacy, managerial objectives, market and regulatory environment, and dimensions of risk. Credit, 3 semester hours. PREREQ: A “C” or better in FIN 3100.

#### **FIN 4210. International Finance**

This course will provide the student with a comprehensive survey of complex financial concepts as applied to the international arena, through the exploration of theoretical constructs and their practical applications. Topics explored include the international macroeconomic environment, international financial landscape, and the management of the multinational firm. Credit, 3 semester hours. PREREQ: FIN 3100, DSC 3130, MAT 2150 or 2210.

#### **FIN 4800. Financial Institution Internship**

A work experience in a bank or financial institution where the student, under academic and employer supervision, participates in actual managerial functions and is exposed to the daily operation, decisions and working policies of the bank (minimum of 40 work hours per semester credit hour required). Students must keep an extensive diary of work experiences and submit frequent reports to the academic supervisor. Credit, 1-3 sem. hours. Pass/Fail. May be repeated for credit. PREREQ: A “C” or better in FIN 3100 and the consent of Dean or faculty member supervising bank internships.

#### **FIN 4990. Directed Studies in Finance**

Independent study in an area of finance of particular interest to a student under the direction of one or more faculty members. Students must submit detailed proposals for a directed study, detailing the proposed plan of study, research involved, dates for deliverables, final product to be produced, and faculty who will be supervising. Proposals will be reviewed by a faculty committee to determine acceptance of the proposal. Credit, 1-3 semester hours. PREREQ: A “C” or better in FIN 3100 and permission of the Department.

#### **FINS 4xxx. Special Topics in Finance**

The study of a particular topic of special importance, relevance, and currency in the field of finance. The content of the special topics course varies with each offering. Course may be repeated as long as topic being studied is different. Credit, 3 semester hours. PREREQ: A “C” or better in FIN 3100 or permission of the instructor.