

# BUSINESS (BUS)

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## BUS 100

### Introduction to Business

This course introduces students not only to the business environment but also to the different purposes and functions of businesses. Students will obtain a broad understanding of the fundamentals of business organizations and their operations and, in the process, learn the basic terminology and concepts employed in the business world. Students will also gain experience using computer applications popular in the business community such as Excel, Word, and Access Database.

**Lecture: 3 Lab: 0 Credits: 3**

**Satisfies:** Communications (C), Ethics (E)

## BUS 102

### Computing Tools for Business Analysis

This course builds competency with the most commonly used software tools used in business (Microsoft Excel, Access, Word, and Power Point) while also reinforcing business concepts, modes of thinking, and communication skills. Course sessions, held in a PC lab, will cover basic-through-intermediate skills for each application using exercises and mini-cases that require students to analyze business problems and consider how best to communicate information, results, and findings. Course work will be integrated across the various tools in the Office suite and also across various business disciplines. Students will learn not just the computing tools themselves but also how such tools are used in today's business environment to manage information, analyze data, and communicate more effectively.

**Lecture: 3 Lab: 0 Credits: 3**

## BUS 103

### Ideation: What Are My Interests?

This course introduces students to methods of exploration and analysis of ideas. Students will participate in creativity exercises, practice brainstorming, and use tools (such as SWOT) that will provide a framework for analyzing interests and understanding comparative values. Students will practice storyboarding techniques and learn to present their ideas in a clear and concise manner.

**Lecture: 0 Lab: 1 Credits: 1**

## BUS 104

### Needs Analysis and Opportunity Analysis Aligned with My Interests

This course introduces students to user observation and research tools. Students will apply these tools to their project idea. Students will learn research planning and employ several methods, such as ethnographic interviewing techniques or journals/diaries, and translate their findings into a report.

**Lecture: 1 Lab: 0 Credits: 1**

## BUS 203

### Identification and Evaluation of Prospective Consumers

This course introduces students to primary and secondary market research tools and analysis. Students will be expected to go into the field to research prospective consumers relevant to their project. Students will learn of research sources beyond Google. Students will also learn and apply analytical techniques to understand the data.

**Prerequisite(s):** BUS 104

**Lecture: 1 Lab: 0 Credits: 1**

## BUS 204

### Identification and Evaluation of Competitive Advantage

Students will be expected to determine the strengths and weaknesses of the competitors within the target market, strategies that will provide the startup with a distinct advantage, the barriers that can be developed to make the competitive advantage sustainable, and any weaknesses that can be exploited within the product development cycle.

**Prerequisite(s):** BUS 203

**Lecture: 1 Lab: 0 Credits: 1**

## BUS 210

### Accounting for Non-Business Majors

This course introduces the student to basic financial and managerial accounting topics: GAAP, the major financial statements, accrual accounting, financial reporting alternatives, financial statement analysis, cost behavior, cost systems, short-term and long-term decision-making, and product costing. BUS 210 should not be taken by business majors.

**Lecture: 3 Lab: 0 Credits: 3**

## BUS 211

### Financial Accounting

This course introduces students to the financial reporting practices of firms ranging in size from sole proprietorships to Fortune 500 companies. Although the predominant focus will be on reporting principles used in the United States, the course will consider international reporting standards as well. Students will learn some of the metrics (ratios) by which one measures the financial health of a firm, whether small or large, domestic or international. Finally, using a popular financial management software package, students not only will learn how businesses track their day-to-day transactions and report on operations but also will be able to apply this knowledge to their personal and/or business finances.

**Prerequisite(s):** BUS 100

**Lecture: 3 Lab: 0 Credits: 3**

**Satisfies:** Ethics (E)

## BUS 212

### Managerial Accounting

This course introduces students to how managers use accounting information to make decisions and to monitor and control the operations of their businesses. Students will learn how an entity's profits respond to changes in sales volume, selling prices, and costs. They will also learn how to distinguish between relevant and irrelevant information and use the former to make sound business decisions. The principles introduced in this course are applicable to domestic and international businesses of all sizes.

**Prerequisite(s):** BUS 211

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 221****Business Statistics**

Business decisions are often difficult and risky because decisions have to be made with incomplete and imperfect information.

The primary purpose of this course is to introduce the basics of modeling and analyzing complex problems that involve business decision-making under uncertainty. Students will learn probability theory and some basic statistical concepts and procedures. The course emphasizes techniques for formulating decision problems and analyzing data. Students will also learn how to use computer software in decision and statistical analyses.

**Prerequisite(s):** MATH 151 and BUS 100

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 301****Organizational Behavior**

Successful managers are able to align business strategies with the organization's culture and core competencies. In this course, students will develop the managerial skills needed to succeed in today's increasingly competitive global economy. The course explores how individuals are motivated to learn, decide, and coordinate in individual versus group settings. Students will apply these concepts to resolve a wide array of problems in real world organizational settings, such as creating an innovative culture, developing an effective performance management system, and managing a diverse workforce. Particular emphasis will be given to development of leadership skills and entrepreneurship.

**Prerequisite(s):** (BUS 100 and ECON 151) or ECON 211

**Lecture: 3 Lab: 0 Credits: 3**

**Satisfies:** Ethics (E)

**BUS 303****Financial Analysis: Pro-Forma Financial Statements**

Financial Analysis: Pro-Forma Financial Statements requires students to develop pro-forma financial statements for a business of their own choosing. They will begin by subjecting at least two similar firms (the "comparable" firms) to a rigorous financial analysis with the objective of identifying their strengths and weaknesses. In the process, students will investigate measures of liquidity (short-term and long-term), efficiency, and profitability. Utilizing the strengths and weaknesses of the comparable firms, students will develop pro-forma financial statements for their own business.

**Prerequisite(s):** BUS 351 and BUS 204

**Lecture: 1 Lab: 0 Credits: 1**

**BUS 305****Operation and Supply Chain Design**

This course introduces students to concepts and techniques related to the design, planning, control, and improvement of both service and manufacturing operations. The course helps students become conversant in the language of operations management and provides them with the quantitative and qualitative tools needed to analyze basic operations issues. It also describes the role of operations management in the overall strategy of a firm. The topics covered include process analysis, waiting line management, project management, inventory and supply chain management.

**Prerequisite(s):** MATH 151 and BUS 100

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 311****Strategic Cost Management**

This course explores the uses and limitations of accounting information as an integral part of a manager's decision process. BUS 311 goes beyond BUS 211 and 212 by integrating economics, finance, and statistics among other disciplines in the consideration of actual business cases. Some of the topics included will be cost estimation, activity-based costing, quality control, transfer pricing, and divisional performance evaluation.

**Prerequisite(s):** BUS 351 and BUS 212

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 321****Optimization and Decision-Making**

The role of business decision-making is often how to best design and operate a system. Many managerial decisions, regardless of their functional orientation, are, therefore, increasingly based on analysis using quantitative models from the discipline of management science. Management science tools, techniques and concepts have dramatically changed the way business operates in manufacturing, service operations, marketing, and finance. BUS 321 introduces students to various ways of modeling, or thinking structurally about, decision problems in order to enhance decision-making skills. Students will gain experience using spreadsheets to deal with complex managerial decision problems.

**Prerequisite(s):** BUS 221

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 341****Business Law**

BUS 341 surveys the many challenges and opportunities faced by the entrepreneur in the modern global economy. Starting with basic contract law, corporate law, and intellectual property law, the course then explores issues of business organization for entrepreneurs, the legal implications of debt and equity financing, the protection of the expression of ideas that is afforded by copyrights, and the protection of corporate goodwill that is afforded by trademark law as well as the statutory restraints imposed by statutes such as the Financial Services Modernization Act, the Health Insurance Portability and Accountability Act ("HIPPA"), and Children's Online Privacy Protection Act ("COPPA"). The course will broaden the student's perspective into the international environment by studying cross-border data privacy as well as statutes such as the Foreign Corrupt Practices Act ("FCPA").

**Prerequisite(s):** BUS 100

**Lecture: 3 Lab: 0 Credits: 3**

**Satisfies:** Ethics (E)

**BUS 351****Financial Decision-Making**

BUS 351 introduces students to time value of money concepts and how these concepts are used in making long-term financial decisions. In addition, the course will expose students to after-tax cash flow analysis using a variety of decision models that are appropriate for sole proprietorships, partnerships, and corporations, whether they are newly-founded or established firms. Many of the principles introduced here can be applied to personal financial decisions such as retirement planning, car loan analyses and home mortgage analyses, for example.

**Corequisite(s):** BUS 212

**Prerequisite(s):** BUS 212\* and BUS 221, An asterisk (\*) designates a course which may be taken concurrently.

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 361****Entrepreneurship I**

BUS 361 focuses on the role of entrepreneurship within larger, established companies. It provides students wishing to become either corporate managers or entrepreneurs with the information, frameworks and techniques needed to plan, start, evaluate, control, and successfully operate corporate ventures.

**Prerequisite(s):** BUS 351

**Lecture: 3 Lab: 0 Credits: 3**

**Satisfies:** Ethics (E)

**BUS 371****Marketing Fundamentals**

BUS 371 focuses on the information, frameworks and techniques required to devise a marketing strategy for the organization. The course begins with an understanding of how to design products and services for consumers based on their needs and their budget constraints. It then moves to an evaluation of the capabilities of the firm, its collaborators, and its competitors in service of developing appropriate price and promotion strategies when going to market. This course has no formal pre-requisites, but students will benefit from a basic background in microeconomics and basic statistics.

**Lecture: 3 Lab: 0 Credits: 3**

**Satisfies:** Ethics (E)

**BUS 382****Business Economics**

This course focuses on the use of economic principles for business and managerial decision making. The course aims to provide students with frameworks for studying business decisions that managers routinely face and equip students with the tools necessary to better understand the ramifications of their choices. The course builds on concepts of microeconomics and the theories of industrial organization to deliver formal methods for analyzing business decisions. After reviewing consumer and producer theories, the course will delve into game theory, information economics, and the study of imperfectly competitive markets, and proceed to introduce students to business strategies that assist managers in earning and sustaining competitive advantages in the marketplace.

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 403****Developing a Strategically Competitive Business Plan**

This course introduces students to the research process for developing business plans. They will evaluate a business concept, collect, analyze and organize market research data into a marketing plan; formulate a business model; and prepare financial projections, among other key components of a formal business plan.

**Prerequisite(s):** BUS 304

**Lecture: 1 Lab: 0 Credits: 1**

**BUS 404****Selling Your Business Plan**

In BUS 404 students will be expected to explore various options in raising money to fund a business, their advantages and disadvantages, the right ways to negotiate and close the deals.

**Prerequisite(s):** BUS 403

**Lecture: 1 Lab: 0 Credits: 1**

**BUS 452****International Finance**

International finance is a combination of macroeconomics and finance. The course covers macroeconomic models of exchange rate and interest rate determination and it also covers the participants and instruments that trade in the foreign exchange market. By the end of the course, participants should be able to construct portfolios and analyze the risk of their positions.

**Prerequisite(s):** BUS 351

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 454****Investments**

The course is a survey of asset pricing theory. The fundamentals of bond and option pricing are covered as well as the CAPM, APT and the Fama French models. Excel spreadsheet modeling is used to illustrate and understand the concepts of Markowitz's Mean Variance Optimization, equity valuation, option pricing, and utility theory.

**Prerequisite(s):** BUS 351

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 455****Corporate Finance**

This course is an advanced introduction to modern corporate finance. Topics include cash flow forecasting, optimal dividend policies, mergers and acquisitions, structured finance, capital at risk, and the risk of adjusted return on capital. The philosophical foundation of the course is the concept of shareholder value added. Students will learn how financial decisions can contribute to the value of modern corporation.

**Prerequisite(s):** BUS 351

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 456****Financial Economics I**

This course provides a systematic exposition of the primary mathematical methods used in financial economics. Mathematical concepts and methods include logarithmic and exponential functions, algebra, mean-variance analysis, summations, matrix algebra, differential and integral calculus, and optimization. The course will include a variety of financial applications including compound interest, present and future value, term structure of interest rates, asset pricing, expected return, risk and measures of risk aversion, capital asset pricing model (CAPM), portfolio optimization, expected utility, and consumption capital asset pricing (CCAPM).

**Prerequisite(s):** BUS 351

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 457****Financial Modeling I**

This course is the first of three subjects that form the Financial Modeling Sequence. It is designed to provide students with the necessary programming skills necessary to create realistic financial models. It is an essential core subject and must be completed in order to obtain the MSF degree. Modeling I focuses on the implementation of financial models in MS Excel using Visual Basic for Application (VBA).

**Prerequisite(s):** BUS 351

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 458****Financial Derivatives**

This course provides the foundation for understanding the price and risk management of derivative securities. The course starts with simple derivatives (e.g., forwards and futures) and develops the concept of arbitrage-free pricing and hedging. Based upon the work of Black, Scholes, and Merton, the course extends their pricing model through the use of lattices, Monte Carlo simulation methods, and more advanced strategies. Mathematical tools in stochastic processes are gradually introduced. Particular emphasis is given to the pricing of interest rate derivatives.

**Prerequisite(s):** BUS 221 and BUS 351 and BUS 321

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 467****Entrepreneurship II**

BUS 467 focuses on the behaviors of entrepreneurs (both successful and unsuccessful), entrepreneurial networks, the venture creation process, new venture strategies, identification and evaluation of new venture opportunities, new venture financing, legal and tax considerations, market entry strategies, and the development of a formal business plan in a global context.

**Prerequisite(s):** BUS 351

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 469****Entrepreneurship Capstone**

BUS 469 provides students a hands-on, real world opportunity to: 1) identify, investigate and/or evaluate the suitability of a product or service to the marketplace; 2) work with an existing company to evaluate and/or investigate a product or service opportunity for the company; or 3) investigate and/or evaluate a research-based technology for suitability as a product or service. Students will either build or join a small team to develop a prototype, engage customers/partners, and identify support and/or funding. Business students who have taken the prerequisite (or equivalent) courses may register with instructor approval. Prerequisite: Entrepreneurship Minor Classes (4) and IPRO.

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 471****Marketing Management**

The Marketing Management course is designed to provide students with an overview of the decision making process in marketing. Marketing decision-making is a process that is essentially wrapped around the fundamental goal of creating value in the marketplace. This requires a professional knowledge of market drivers, competitors' capabilities, technological trends, and the market dynamics of value. The orientation is toward the kinds of marketing decisions that managers must make within the modern business environment. A primary goal of this course is to provide a thorough understanding of the rapidly changing business environment and the various stakeholders that influence the marketing management function.

**Prerequisite(s):** BUS 371

**Lecture: 3 Lab: 0 Credits: 3**

**Satisfies:** Communications (C)

**BUS 472****New Product Development**

This course offers students a solid grounding in the theory and practice of new product development. Using a combination of theory-based lecture, hands-on exercises and assignments, and discussion, students will develop skills across the entire product development process—from opportunity identification through product launch.

**Prerequisite(s):** BUS 371

**Lecture: 3 Lab: 0 Credits: 3**

**Satisfies:** Communications (C)

**BUS 473****Marketing Research**

This course provides students with a detailed exposure to state-of-the-art marketing research techniques and their applications. Topics include: problem definition, research design, exploratory research, the use of secondary and syndicated data sources and questionnaire development and analysis. Course exercises and projects will emphasize the use of research information for effective marketing decision making.

**Prerequisite(s):** BUS 371

**Lecture: 3 Lab: 0 Credits: 3**

**Satisfies:** Communications (C), Ethics (E)

**BUS 475****Sales Management**

Addressing modern technology and methods of selling and presenting highly technical subjects is the basis of this course. Engineers, Information Technologists, Architects, and those dealing with state of the art products will benefit from this new created course that will address the rapidly changing profession of highly skilled representatives, sales persons, and entrepreneurs. The class content will include guest speakers from technical corporations, leading promotion and e-commerce firms to discuss basic requirements for sustaining current customer base and increase gross sales. Application, simulation and case studies from small and mid-sized firms will be reviewed.

**Prerequisite(s):** BUS 371

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 476****Consumer Behavior**

Good marketing practice requires an understanding of consumers: their needs, why they buy, and how they buy. This course draws on the fields of psychology, sociology, economics, demography, and anthropology to study the various internal and external influences on consumer behavior and decision making. Topics include: perception, memory and learning, motivation, attitudes and attitude change, involvement, cultural and cross-cultural influences, communications and influence tactics, and customer satisfaction.

**Prerequisite(s):** BUS 371

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 480****Strategic Management and Design Thinking**

BUS 480 presents a conceptual and analytical framework for understanding the operation of the firm within a changing business environment from the perspective of the upper management team. The course develops the student's ability to think constructively about the pursuit of sustainable competitive advantage through the systematic identification, evaluation and creation of attractive business and corporate opportunities.

**Prerequisite(s):** BUS 467

**Lecture: 3 Lab: 0 Credits: 3**

**Satisfies:** Ethics (E)

**BUS 497****Independent Study in Business**

Independent study in Business as designed to provide the student with an option to study a specific area of Business in more depth than is offered in the curriculum. For example, a student could expand upon subject matter contained in the existing curriculum, or the student could explore an area of business not currently in the curriculum. In either event, the student, the instructor, and the student's advisor must agree upon a plan of study prior to enrolling in the course. **\*\*Instructor permission required.\*\***

**Credit:** Variable

**BUS 498****Undergraduate Workplace Immersion**

This course provides undergraduate students with a supervised, immersive, hands-on experience in a US workplace where they will gain exposure to an industry and practical experience with projects related to their interests. Students will work for a minimum of eight weeks, 32 hours/week. Students will be matched with an organization according to their area of study, related experience, and/or relevant skillset.

**Lecture: 0 Lab: 6 Credits: 3**

**BUS 510****Fundamentals of Innovative Business**

This is an introductory course on the fundamentals of doing business in an increasingly interconnected and hypercompetitive world where rapid information flows, environmental degradation, and societal challenges (e.g., poverty and ethics) can be viewed as both threats and opportunities facing for-profit enterprises. Students will learn that sustainable businesses are also innovative businesses and that sustainability often drives innovation. Students will not only be exposed to the basics of starting, growing, and running a profitable business but also learn how to do so in an environmentally and socially sustainable fashion. They will learn how companies create and capture value and how to analyze the business environment, industry, competitors, and customers. They will be introduced to corporate, business, and functional strategy and learn about different business functions (accounting, finance, operations, marketing, and information management). Students will be introduced to critical challenges of global sustainability and will explore through case studies how leading companies are implementing triple bottom line accounting, sustainable growth, and stakeholder value creation strategies. Finally, they will develop an innovative business idea to start a brand new company that has sustainable growth in its mission statement.

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 550****Business Statistics**

This course covers statistics, optimization, and simulation tools that are critical for managers in enabling their firms to have a competitive advantage. The course covers probability, sampling, estimation, hypothesis testing, linear regression, goodness-of-fit tests, linear optimization models, nonlinear optimization models, and managerial decision-making under uncertainty. The models address problems in finance, marketing, and operations and include applications such as media selection, capital budgeting, portfolio selection, advertising effectiveness, facility location, distribution planning, and production planning. The focus of the course is on using business analytics to build models and using software to aid in decision-making.

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 590**

**Business Strategy Capstone Project**

This is a forward-looking and experiential course that helps students understand how companies could successfully compete in the "next economy" through innovation and integrative problem-solving. It aims to integrate all of the key lessons from the M. B. A., M. S. EMS, and M. S. MAC programs to develop innovative solutions to solve real-world problems that actual companies face. The course is heavily project-based. Cross-disciplinary teams of students will act as management consultants to companies to identify and solve problems taking a holistic and integrative perspective. There will be lectures on various aspects of business strategy, sustainability, systems thinking, execution, innovation, and team effectiveness from faculty members and industry experts. Student teams will present their findings to fellow students, faculty members, and client companies. Prerequisite: Students should have successfully completed all of their respective program core courses.

**Prerequisite(s):** MBA 505 with min. grade of C and MBA 513 with min. grade of C and MBA 509 with min. grade of C

**Lecture: 3 Lab: 0 Credits: 3**

**BUS 598**

**Graduate Workplace Immersion**

This course provides graduate students with a supervised, immersive, hands-on experience in a US workplace where they will gain exposure to an industry and practical experience with projects related to their interests. Students will work for a minimum of eight weeks, 32 hours/week. Students will be matched with an organization according to their area of study, related experience, and/or relevant skillset.

**Lecture: 0 Lab: 6 Credits: 3**