

ORFALEA COLLEGE OF BUSINESS

https://www.cob.calpoly.edu/

Mission Statement

We educate career-ready future business leaders in a polytechnic, learn by doing environment and produce research that positively influences business and society.

The BS degree program and the graduate programs in Business Administration are accredited by the AACSB—The International Association to Advance Collegiate Schools of Business. The objective of accreditation is to foster high-quality educational programs.

The college's educational philosophy follows the Cal Poly tradition- that of enlisting maximum student involvement in the learning process through case analysis, special projects, internships, computer simulations and other learn by doing exercises. Educational programs are designed to challenge highly motivated students to become tomorrow's socially responsible business leaders through a learn-by- doing technology-oriented education. The curricula include general education requirements and specialized studies in the student's major field. Optional areas of concentration within each major enable the student to select the program most closely suited to the chosen career field.

The college is organized into six areas:

- · Accounting and Business Law
- Economics
- Finance
- · Industrial Technology, Packaging and Entrepreneurship
- Marketing
- · Management, Human Resources, and Information Systems

This organizational structure allows for programs of study that blend broad-based knowledge of the functional disciplines of Business, Economics, and Industrial Technology and Packaging with an in-depth study of particular discipline(s).

Accounting and Business Law Area

Accounting provides information for making informed business decisions by decision makers both external and internal to the firm. The Accounting and Business Law Area works closely with the accounting profession to help ensure curriculum relevancy and technical competencies. The accounting concentration prepares students for careers in public accounting (tax, audit and advisory), private industry, government, and not-for-profit organizations.

Economics Area

The mission of the economics program is to educate students in the models and problem-solving tools of economics. The Economics Area offers a Bachelor of Science degree, a Master of Science degree, and a minor in Economics.

Finance Area

The Finance Area offers Financial Management (FM) and Real Estate Finance (REF) concentrations. Both provide a rigorous, coherent, real-world, and up-to-date curriculum to prepare students for rewarding careers. The FM concentration is a Chartered Financial Analyst (CFA®) Institute Affiliate Program and a CFP® Board Registered Program, enabling our students to pursue both designations. Finance is a diverse and rapidly evolving field that encompasses a wide range of career paths—from managing corporate finance and advising individual clients to building models for global investment firms and developing technology-driven financial solutions. To help students better prepare for the demands of the modern finance industry, the FM concentration offers three optional specializations focusing on Financial Analytics, Financial Management, and Financial Planning and Wealth Management.

Industrial Technology, Packaging, and Entrepreneurship Area

The Industrial Technology, Packaging, and Entrepreneurship (ITPE) Area offers a Bachelor of Science (BS) degree in Industrial Technology and Packaging (ITP) with two concentrations: Industrial Technology and Packaging. The BS ITP degree has three emphasis areas: Packaging Systems, Product Development, and Supply Chain Management. In addition, the ITPE Area offers minors in Industrial Technology and Packaging, providing students from other majors an opportunity to gain specialized knowledge in these fields.

The ITPE Area also serves as the administrative home for the interdisciplinary Entrepreneurship concentration and minor, as well as the Consumer Packaging concentration, both of which are available to students pursuing a Business Administration degree.



Management, Human Resources, and Information Systems Area

The Management, Human Resources (HR), and Information Systems Area offers all business students coursework in organizational behavior, information systems, international management, and business strategy. We offer concentration-specific courses in both: (1) Management and Human Resources (MHR), and (2) Information Systems.

Through an experiential learning approach, the HR portion of the curriculum prepares students to become practicing professionals in basic HR functions such as recruitment, staffing, training and development, and compensation. The Management portion of the curriculum prepares students for entry-level leadership and management positions, including opportunities in management training programs in large corporations, management consulting, and managerial positions in family businesses and other small organizations. Across the curriculum, emphasis is placed on helping students develop four key competencies critical for transformational business leaders: leveraging people skills, cultivating inclusive and equitable workplaces, navigating uncertainty, and solving problems with data.

The information systems concentration combines the study of people, organizations and technology. Information systems students develop a broad-based, sought-after skill set that combines a foundation of business principles and strategy with rigorous technological skills. Following the university's Learn by Doing philosophy, students receive hands-on skill development with the latest software platforms and work on real-world collaborative projects alongside their peers, faculty, and our corporate partners. With the current business environment that relies heavily on information technology, our students are well prepared for challenging careers in a global economy.

Marketing Area

The Marketing Area offers the Marketing Management concentration which cultivates agile marketers, who integrate data analytics, critical thinking and creativity. The curriculum is a conscious balance among the technical rigors of data, the nuance of creative strategy, and the finesse of customer relationship management. Students engage in hands-on projects that provide experience and confidence. From market research to communications strategies, students have opportunities to provide data-driven guidance and creative solutions to local startups, Cal Poly organizations, and the community.

As a discipline with broad applications, the Marketing Management concentration offers flexible career paths and work styles. Graduates are in demand for positions in market research and analytics; business development and sales; and marketing communications, advertising, digital and product marketing.

Orfalea Student Service

Mission Statement

Orfalea Student Services empowers future global business leaders to forge their unique path to success. We cultivate a dynamic and inclusive environment that supports student needs through advising, mentoring, and connection to industry. We deliver comprehensive programming that encourages exploration, leadership, and exposure beyond the classroom, resulting in career ready graduates who add value to their communities and industry

Services Provided

- · Professional Advisors that provide advising and counseling addressing areas of personal, academic, and career success
- · Peer Advisors that provide assistance with progress to degree, study abroad, change of major and other administrative issues
- · Peer, Young Alumni, and Executive Mentors
- Career readiness programs and initiatives, including career coaching, and connection with employers and industry BUS 1100, BUS 2206, and BUS 3306 (Career Readiness I, II, and III)
- · Enrollment management
- · Student scholarships and grants
- Orfalea OutREACH, a Faculty & Staff student referral system
- · Multicultural Business Program
- · Ambassadors, who provide prospective student and executive tours
- · International student support
- Quarterly workshops, events and programs focused on student success

Transfer Students

Transfer students to the Orfalea College of Business should refer to the curricula listed for the appropriate major. Please note that all lower division courses may be completed at most California Community Colleges. Full time students who have successfully completed all lower division courses prior to transferring to the College of Business can usually anticipate graduating in four semesters. Admitted transfer students should seek immediate advising assistance from Orfalea Student Services.

Undergraduate Programs

- Business Administration (BS) (https://catalog.calpoly.edu/business/undergraduate/business-administration-bs/)
- Economics (BS) (https://catalog.calpoly.edu/business/undergraduate/economics-bs/)
- Industrial Technology and Packaging (BS) (https://catalog.calpoly.edu/business/undergraduate/industrial-technology-packaging-bs/)



Undergraduate Minors

- · Accounting Minor (https://catalog.calpoly.edu/business/undergraduate/accounting-minor/)
- · Economics Minor (https://catalog.calpoly.edu/business/undergraduate/economics-minor/)
- Entrepreneurship Minor (https://catalog.calpoly.edu/business/undergraduate/entrepreneurship-minor/)
- Industrial Technology Minor (https://catalog.calpoly.edu/business/undergraduate/industrial-technology-minor/)
- Packaging Minor (https://catalog.calpoly.edu/business/undergraduate/packaging-minor/)
- Sales Minor (https://catalog.calpoly.edu/business/undergraduate/sales-minor/)

Graduate Programs

- Business Administration (MBA) (https://catalog.calpoly.edu/business/graduate/business-adminstration-mba/)
- Business Analytics (MS) (https://catalog.calpoly.edu/business/graduate/business-analytics-ms/)
- Quantitative Economics (MS) (https://catalog.calpoly.edu/business/graduate/quantitative-economics-ms/)

BUS Courses

BUS 1100 Career Readiness I (1 unit)

Term Typically Offered: F

Skills for academic and professional success, including time management, values exploration, networking, and creating a professional resume. Integration of academic, leadership, and career exploration within a comprehensive graduation plan that optimizes the college experience. Course may be offered in online or hybrid format. 1 activity. Formerly BUS 100.

BUS 1101 Accounting Principles I (3 units)

Term Typically Offered: F

Offered at Solano Campus. Financial accounting principles within which a company functions. Topics include measuring income, establishing financial position, and reporting the results of the accounting cycle. 3 lectures. Formerly BUS 100 at Cal Maritime.

BUS 1102 Accounting Principles II (3 units)

Term Typically Offered: SP

Prerequisite: BUS 100 or BUS 1101.

Offered at Solano Campus. Planning and controlling business operations. Includes data analysis, budgets, product costing and pricing, and quantitative decision-making. 3 lectures. Formerly BUS 101 at Cal Maritime.

BUS 1125 Introduction To International Maritime Business & Supply Chain Management (3 units)

Term Typically Offered: F

Offered at Solano Campus. Introduction to international maritime business and supply chain management. International maritime business topics surveyed include a history of the maritime industry, global business, business formation, shipping operations, maritime regulatory and classification societies, port services and human resource management challenges. Psychological and physiological impacts of stress and fatigue on workers at sea and on land, their safety implications, policy solutions and best management practices are also covered. Functional areas of supply chain management explored in an integrated manner include procurement, operations management, transportation and logistics, inventory management, and demand planning. General business principles and information literacy relevant to research in the fields of international maritime business and supply chain management, as well as the social implications and societal impacts of these fields are emphasized. 3 lectures. Formerly BUS 125 at Cal Maritime.

BUS 1165 Business Decision Analysis (3 units)

Term Typically Offered: SP

Offered at Solano Campus. Introduction to making management decisions using complex or incomplete information. Explore common contributors to decision making errors and learn to distinguish rigorous sources from opinions, pseudoscience, or propaganda. Requires application of rudimentary statistical methodologies learned in class. 3 lectures. Formerly BUS 165 at Cal Maritime.



BUS 1204 Financial Literacy (3 units)

Term Typically Offered: F, SP 2026-28 or later catalog: GE Area 2 2020-26 catalogs: GE Area B4

Prerequisite: Appropriate Math Placement or MATH 1006.

Introduction to personal finance. Budgeting, savings, employee benefits, retirement planning, taxes, insurance, and investments including stocks, bonds, and real estate. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Fulfills GE Area 2 (GE Area B4 for students on the 2020-26 catalogs). Formerly BUS 204.

BUS 1342 Financial Institutions (3 units)

Term Typically Offered: F, SP

Recommended: STAT 252 or STAT 1220.

Theory and applications of financing business operations. Overview of financial markets and instruments. Financing options for corporations. Risk-return trade-off in financial markets. Applying time value of money to business and investment problems. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Replaces BUS 342.

BUS 2200 Special Problems for Undergraduates (1-4 units)

Term Typically Offered: F, SP, SU

Prerequisite: Sophomore standing and consent of area coordinator.

Individual investigation, research, studies, or surveys of selected problems. Repeatable up to 4 units. Formerly BUS 200.

BUS 2201 Taxation and Society (3 units)

Term Typically Offered: F, SP 2026-28 or later catalog: GE Area 4B 2020-26 catalogs: GE Area D2

Role of taxation in society, including impact on income inequality and incentives for business. Taxation of capital versus labor. Impact of taxes on gifts and inheritances, home ownership, retirement savings, and charitable giving. Taxation from a global perspective. 3 lectures. Fulfills GE Area 4B (GE Area D2 for students on the 2020-26 catalogs).

BUS 2202 Introduction to Marketing (3 units)

Term Typically Offered: F

Prerequisite: ECO 100 or ECO 1100.

Offered at Solano Campus. Introduction to the marketing function in a business environment. Marketing components of product, price, place, and promotion are examined in the context of the competitive business arena. Case studies are discussed. Create a unique marketing plan. 3 lectures. Formerly BUS 200 at Cal Maritime.

BUS 2206 Career Readiness II (1 unit)

Term Typically Offered: F, SP

Prerequisite: Sophomore standing, BUS 100, or BUS 1100.

Career exploration, personal branding, and internship preparation, focusing on professional communication, networking, and interviewing skills. Values, interests, and personality as they relate to career pathways and skills needed to excel in a global business environment. Course may be offered in online or hybrid format. 1 activity. Formerly BUS 206.

BUS 2207 Legal Responsibilities of Business (3 units)

Term Typically Offered: F, SP, SU

Examination of the American legal system, state and federal courts, judges and attorneys, judgment enforcement, alternative dispute resolution, and important legal principles for business operations such as torts, contracts, business organizations, agency, employment, and other. Explores what is law, legal reasoning, and how legal principles influence socially responsible conduct. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 207.



BUS 2208 Shipping and Port Management (3 units)

Term Typically Offered: F, SP

Prerequisite: ECON 201 or ECON 2001.

Examination of operational, economic, managerial, and policy issues in global shipping and port management. Current maritime industry practices emphasized through field trips, guest lectures, contemporary examples, and practical applications. Field trip may be required. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Crosslisted as BUS/ITP 2208.

BUS 2212 Financial Accounting for Nonbusiness Majors (3 units)

Term Typically Offered: F, SP

Introduction to financial accounting theory and practice with an emphasis on financial statement preparation and analysis. Not open to Business majors. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 212.

BUS 2214 Financial Accounting (3 units)

Term Typically Offered: F, SP, SU

Principles of financial accounting for business majors. The course prepares students to understand and interpret financial statement information. Financial reporting standards are explored to give students an understanding of how financial events are reflected in financial statements. Not open to students with credit in AGB 214 or AGB 2214. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 214.

BUS 2215 Managerial Accounting (3 units)

Term Typically Offered: F, SP, SU

Prerequisite: One of the following: BUS 212, BUS 214, BUS 2212, or BUS 2214. Recommended: Demonstrated competency in electronic spreadsheet, word processing, and presentation applications.

Applications of accounting for making business decisions. Planning and control issues, including cost behavior, budget preparation, and performance reporting. Addresses social responsibility and employee motivational and behavioral considerations. Preparation of spreadsheet applications useful for decision-making. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 215.

BUS 2220 Business Basics for Entrepreneurs (4 units)

Term Typically Offered: F, SP

Prerequisite: Entrepreneurship minors only.

Basic business concepts for non-business major entrepreneurs, including unit economics and simple financial statements, intellectual property, entrepreneurial marketing, information technology, team management, and business ethics. Course may be offered in classroom-based, online, or hybrid format. 4 lectures. Formerly BUS 220.

BUS 2234 Introduction to Design Thinking (4 units)

Term Typically Offered: F

Prerequisite: Entrepreneurship Concentration, Entrepreneurship Minor, or Graphic Communication major.

Introduction to the process of design thinking and human centered design including design process, methodology, and implementation. Empathy, creativity, iterative prototyping, and contextual design of products and services. 4 discussions. Crosslisted as BUS/ENGR 2234. Formerly BUS/ENGR 234.

BUS 2270 Special Topics (1-4 units)

Term Typically Offered: TBD

Prerequisite: Consent of instructor.

Directed group study of special topics. The Class Schedule will list topic selected. Repeatable up to 8 units. Course may be offered in classroom-based, online, or hybrid format. 1 to 4 lectures. Formerly BUS 270.



BUS 3300 International Business I (3 units)

Term Typically Offered: SP Prerequisite: Junior standing.

Offered at Solano Campus. Introduction to the effects of multi-national operations on business strategy and decision making by exploring the economic, political, financial, legal, and social nature of the international environment. Formulation, selection, and implementation of multi-national strategies are examined in the context of the global business environment. 3 lectures. Formerly BUS 300 at Cal Maritime.

BUS 3301 International Business II - Country Research Analysis and Global Marketing (3 units)

Term Typically Offered: F Prerequisite: Senior standing.

Offered at Solano Campus. Explore, in detail, some major issues of doing business globally, such as environmental, supply chain, competition, regulation, exchange rates, international finance, legal environment, and cultural issues. Case studies, research, and analysis of specific markets. 3 lectures. Formerly BUS 301 at Cal Maritime.

BUS 3302 International and Cross Cultural Management (3 units)

Term Typically Offered: F, SP

Prerequisite: Completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs); completion of GE Area 3B (GE Area C2 for the 2020-26 catalogs); completion of GE Area 4A (GE Area D1 for the 2020-26 catalogs); and completion of GE Area 4B (GE Area D2 for the 2020-26 catalogs).

Dimensions of culture and its variations within and across nations. Frameworks for analyzing cultural and contextual influences on organizational behavior, culture shock and readjustment, expatriation and repatriation, cultural change and innovation, intercultural conflict, and ethical dilemmas. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 302.

BUS 3304 International Supply Chains (3 units)

Term Typically Offered: F

Prerequisite: Consent of instructor.

Design and development of global supply chain networks. Focus on product value chain, coordination, sourcing, packaging systems, transportation, and sustainability. Analysis of target country history, culture, geography, economy, and infrastructure. Study tour to target country is an essential course activity. Field trip required. The Class Schedule will list country selected. 2 lectures, 1 activity. Crosslisted as BUS/ITP 3304. Formerly BUS 304.

BUS 3306 Career Readiness III (1 unit)

Term Typically Offered: SP

Prerequisite: Junior standing and BUS 206 or BUS 2206.

Advanced career preparation, networking, relationship building, influencing, leadership development, and business etiquette. Strategies for finding meaningful and enjoyable work for a fulfilled career and life after graduation. Course may be offered in classroom-based, online, or hybrid format. 1 activity. Formerly BUS 306.

BUS 3308 Logistics and Intermodal Transportation (3 units)

Term Typically Offered: F, SP Prerequisite: ITP 371 or ITP 3371.

Examination of intermodal transportation as a core component of modern logistics systems. Emphasis on integration of truck, rail, maritime, and air modes. Global trade flows, seaport operations, container terminal operations, truck transport, rail, air operations, intermediaries, shippers, and environmental impact. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Crosslisted as BUS/ITP 3308.

BUS 3310 Introduction to Entrepreneurship (4 units)

Term Typically Offered: F, SP

Prerequisite: Completion of one course in GE Area 1 with a grade of C- or better (GE Area A for the 2020-26 catalogs).

Role and impact of entrepreneurship in building startups. Entrepreneurial mindset and skills. Opportunity identification and assessment. Tools for building startups. Founding teams. Business and value proposition models. De-risk through experimentation. Feasibility and viability. Pitch business concepts. Course may be offered in classroom-based, online, or hybrid format. 4 discussions. Formerly BUS/ENGR 310.



BUS 3311 Managing Technology in the International Legal Environment (3 units)

Term Typically Offered: SP

2026-28 or later. Upper-Div GE Area 4 2020-26 catalogs: Upper-Div GE Area D

Prerequisite: Junior standing; completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs); completion of GE Area 2 with a grade of C- or better (GE Area B4 for the 2020-26 catalogs); and completion of GE Area 4B (GE Area D2 for the 2020-26 catalogs).

Analysis of the impacts on United States society stemming from United States and international laws, social influences, economic policies, business practices, and technological innovations. International trade and immigration, intellectual property, the Internet, computer programs, and artificial intelligence. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Fulfills GE Upper-Division 4 (GE Area Upper-Division D for students on the 2020-26 catalogs). Formerly BUS 311.

BUS 3312 Financial Management (3 units)

Term Typically Offered: F

Prerequisite: BUS 100 or BUS 1101; and MTH 105 or MTH 1105.

Offered at Solano Campus. Introduction to management and formation of capital. Finance function and its environment. Techniques of financial analysis. Planning and control. Management of working capital, capital budgeting, cost of capital, money and capital market analysis. Management of capital structure. 3 lectures. Formerly BUS 310 at Cal Maritime.

BUS 3313 Customer Development (4 units)

Term Typically Offered: SP

Prerequisite: BUS/ENGR 310 or BUS 3310.

Experiential approach to the lean startup customer development process. Work with early-stage ventures to develop and execute experiments or market tests that validate, void, or modify business model hypotheses. Design, implement, and validate repeatable and scalable business model strategies. Course maybe offered in classroom-based or hybrid format. 4 seminars. Formerly BUS 313.

BUS 3319 Data Analytics and Accounting Information Systems (3 units)

Term Typically Offered: F, SP

Prerequisite: BUS 214 or BUS 2214 and BUS 215 or BUS 2215 with grades of C- or better; or AGB 214 or AGB 2214 and AGB 323 or AGB 3323 with grades of C- or better, and Accounting minor.

Comprehensive coverage of manual and computerized accounting processes and internal controls. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 319.

BUS 3320 Federal Income Taxation for Individuals (3 units)

Term Typically Offered: F, SP

Prerequisite: BUS 214 or BUS 2214 and BUS 215 or BUS 2215 with grades of C- or better; or AGB 214 or AGB 2214 and AGB 323 or AGB 3323 with grades of C- or better, and Accounting minor.

Federal income taxation and planning for individuals. Federal role of taxation in the business decision-making process. Issues related to individual income tax preparation and introduction to basic property transactions. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 320.

BUS 3321 Intermediate Accounting I (3 units)

Term Typically Offered: F, SP

Prerequisite: BUS 214 or BUS 2214 and BUS 215 or BUS 2215 with grades of C- or better; or AGB 214 or AGB 2214 and AGB 323 or AGB 3323 with grades of C- or better, and Accounting minor.

Comprehensive coverage of financial reporting issues. Financial statements, revenue recognition, and assets other than investments. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 321.



BUS 3322 Intermediate Accounting II (3 units)

Term Typically Offered: F, SP

Prerequisite: BUS 321 or BUS 3321 with a grade of C- or better or consent of instructor.

Comprehensive coverage of financial reporting issues. Covers investments, liabilities, equities, and the Cash Flows Statement. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 322.

BUS 3323 Financial Statement Auditing (3 units)

Term Typically Offered: F, SP Prerequisite: BUS 322 or BUS 3322.

A conceptual and hands-on introduction to financial statement auditing in the context of public company audits. Introduction to Public Company Accounting Oversight Board (PCAOB) Auditing Standards and Association of International Certified Professional Accountants (AICPA) Code of Conduct. Application of current events in and to auditing. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 425.

BUS 3330 Funding and Managing Startup Companies (4 units)

Term Typically Offered: F, SP

Prerequisite: BUS 342 or BUS 1342; and BUS 310 or BUS 3310; and Entrepreneurship concentration; or BUS 220 or BUS 2220; BUS 310 or BUS 3310; and Entrepreneurship minor.

Entrepreneurial financial management basics. Financing startups. Forms and uses of equity and debt financing. Cap-Tables and exit analyses. Investor pitches. Legal, governance and ethical issues in financing. Forward looking financial statements and their connection to financing needs, valuation, and risk. Course may be offered in classroom-based or online format. 4 seminars. Formerly BUS 330.

BUS 3343 Quantitative Methods in Finance (3 units)

Term Typically Offered: F, SP

Prerequisite: One of the following: STAT 252, STAT 302, STAT 325, STAT 1220, STAT 3430, STAT 3520, ECON 339, or ECON 3021; and one of the following: MATH 121, MATH 221, MATH 1264, or MATH 1267.

Rigorous mathematical foundation for introductory finance topics: basics of private and public financial systems, time value of money, risk and return tradeoff. Advanced version of BUS 1342. Strongly recommended for finance students. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 301.

BUS 3346 Principles of Marketing (3 units)

Term Typically Offered: F, SP, SU

Prerequisite: Completion of one course in GE Area 1 with a grade of C- or better (GE Area A for the 2020-26 catalogs).

Development of an understanding of the marketing process, including identifying target markets, developing and launching products or services, and managing pricing, promotion, and distribution strategies. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 346.

BUS 3347 Professional Selling Skills (3 units)

Term Typically Offered: F

Prerequisite: Sophomore standing; and BUS 346 or BUS 3346.

Exploration and cultivation of skills in personal selling. Understanding customers, interpersonal relationships, and the influences of psychology, sociology, economics, and public policy on buyer/seller interactions. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 347.

BUS 3348 Technology-Based Professional Sales (4 units)

Term Typically Offered: SP

Prerequisite: BUS 347 or BUS 3347.

Strategy and technology used in the practice of professional selling. Social selling, customer relationship management (CRM), and insight into sales strategy through exploration of contemporary topics in professional sales. 4 lectures. Formerly BUS 348.



BUS 3370 Special Topics (1-3 units)

Term Typically Offered: F, SP, SU Prerequisite: Consent of instructor.

Offered at Solano Campus. Special topic courses are intended to enable each department to offer an elective course of study when faculty scholarship activities, the expertise of visiting faculty, or off-campus educational programs may afford a unique and worthwhile learning experience. 1 to 3 lectures. Formerly BUS 390 at Cal Maritime.

BUS 3380 Work and Wellbeing (3 units)

Term Typically Offered: SP

Prerequisite: Completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs); and completion of GE Area 3B (GE Area C2 for the 2020-26 catalogs).

Modern conceptualization of wellbeing at work. Impact of wellbeing on personal and professional effectiveness, business strategy. Sources of workplace stress. Positive organizational behavior strategies to promote thriving, happiness, and wellbeing. Role of leaders, culture, and workplace practices on employee wellbeing. 3 lectures.

BUS 3382 Leadership and Organizations (3 units)

Term Typically Offered: F, SP

Prerequisite: Completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs); completion of GE Area 3B (GE Area C2 for the 2020-26 catalogs); and completion of lower-division courses in GE Area 4 (GE Areas D1 and D2 for the 2020-26 catalogs).

Development of leadership skills through personal exploration, concept analysis, and experiential learning. Conceptual understanding of leadership, important insights into oneself as a leader, and skills and competencies necessary for effective leadership. 3 lectures. Formerly BUS 382.

BUS 3384 Human Resources Management (3 units)

Term Typically Offered: F, SP

Prerequisite: Completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs); completion of GE Area 3B (GE Area C2 for the 2020-26 catalogs); and completion of lower-division courses in GE Area 4 (GE Areas D1 and D2 for the 2020-26 catalogs).

Introduction to strategic human resource management with emphasis on functional areas of the discipline including equal employment opportunity, recruitment, selection, training, performance management, compensation, employee wellness. Development of management skills for executing HR practices such as interviews and performance feedback. 3 lectures. Formerly BUS 384.

BUS 3384A Human Resources Management Project (1 unit)

Term Typically Offered: F, SP Coreguisite: BUS 3384.

Advanced application of topics and procedures relevant to human resources management. Individual and group projects or simulations aimed at applying relevant knowledge to solve management and human resource problems. Course offered online only. 1 activity.

BUS 3387 Organizational Behavior (3 units)

Term Typically Offered: F, SP, SU

Prerequisite: Completion of one course in GE Area 1 with a grade of C- or better (GE Area A for the 2020-26 catalogs).

Application of theory and research from behavioral and social science to examine individual, interpersonal, and group effectiveness in organizations. Personality, emotions, diversity, motivation, decision-making, teamwork, conflict resolution, leadership, and organizational culture and change. 3 lectures. Formerly BUS 387.

BUS 3388 Training, Developing, and Managing Employees (3 units)

Term Typically Offered: SP

Prerequisite: BUS 384 or BUS 3384; and one of the following: STAT 252, STAT 1220, ECON 339, or ECON 3021.

Procedures for strategic human resource planning. Develop employee competencies. Design, deliver and evaluate employee training. Manage employee performance, including performance deficiencies. Align procedures with organizational strategic objectives. 3 lectures. Formerly BUS 388.



BUS 3388A Training, Developing, and Managing Employees Project (1 unit)

Term Typically Offered: SP Corequisite: BUS 3388.

Application of theory and research from behavioral and social science to examine individual, interpersonal, and group effectiveness at work, including personality, emotions, diversity, motivation, and decision-making to teamwork, conflict resolution, leadership, and organizational culture and change. Course offered online only. 1 activity.

BUS 3389 Introduction to Business Negotiation for Entrepreneurs (3 units)

Term Typically Offered: SP

Prerequisite: Completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs); and Entrepreneurship minor.

Negotiation theory and skills required for successful entrepreneurship. Applying negotiation skills through simulations. 3 lectures. Formerly BUS 389.

BUS 3389A Negotiation for Entrepreneurs Activity (1 unit)

Term Typically Offered: F

Prerequisite: Entrepreneurship minor. Corequisite: BUS 3389.

Advanced application of topics and strategies relevant to negotiation for entrepreneurs. Individual and group projects or simulations applying relevant knowledge to enhance skills in entrepreneurial negotiations (equity splits, angel investors, supplier contracts). Course may be offered in classroombased, online, or hybrid format. 1 activity.

BUS 3390 Independent Study (1-3 units)

Term Typically Offered: F, SP, SU

Prerequisite: Consent of the department.

Offered at Solano Campus. Substantial study above and beyond the regular offerings in the Academy catalog. Arrangement needed with an Academy faculty member to be the Independent Study Advisor. Approved application for Independent Study must be on file. Formerly BUS 390 at Cal Maritime.

BUS 3391 Information Systems (3 units)

Term Typically Offered: F, SP, SU

Prerequisite: Completion of one course in GE Area 1 with a grade of C- or better (GE Area A for 2022-26 catalogs); or ITP 125 or ITP 1125, and Industrial Technology and Packaging major or Industrial Technology minor.

Information systems, hardware and software, strategy and information systems, databases, networking, systems development, and emerging trends and technologies. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 391.

BUS 3392 Business Application Development (3 units)

Term Typically Offered: F, SP Prerequisite: BUS 391 or BUS 3391.

Fundamental concepts of computer programming, data structures, problem solving, programming logic, and fundamental design techniques. Upto-date application development models, tools, and technologies required to appreciate the complexity of application development and to build functioning business applications. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 392.

BUS 3392A Business Application Development Project (1 unit)

Term Typically Offered: F, SP Corequisite: BUS 3392.

Selection and completion of a project under faculty supervision that complements the coursework on business application development. Course offered online only. 1 activity.



BUS 3393 Database Systems in Business (3 units)

Term Typically Offered: SP, SU Corequisite: BUS 392 or BUS 3392.

Design, development, testing, and implementation of databases for business applications. Data modeling with entity relationship diagrams, data normalization, data integrity. Database physical design, implementation, advanced queries using structured query language (SQL). Database application development culminating in a database project. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 393.

BUS 3393A Database Systems in Business Project (1 unit)

Term Typically Offered: F, SP Corequisite: BUS 3393.

Selection and completion of a project under faculty supervision that complements the coursework on business database systems. Course offered online only. 1 activity.

BUS 3394 Systems Analysis and Design (3 units)

Term Typically Offered: F, SP Prerequisite: BUS 391 or BUS 3391.

Systems development life cycle, requirements gathering, process modeling using data flow diagrams, use case analysis and diagramming, and user interface (UI) design. Course may be offered in classroom-based or hybrid format. 3 lectures. Formerly BUS 394.

BUS 3394A Systems Analysis and Design Project (1 unit)

Term Typically Offered: F, SP Corequisite: BUS 3394.

Selection and completion of a project under faculty supervision that complements the coursework systems analysis and design. Course offered online only. 1 activity.

BUS 3395 Information Systems Project Management (3 units)

Term Typically Offered: F, SP Prerequisite: BUS 391 or BUS 3391.

Introduction to key components of project management in the information systems (IS) context, with focus on the technical, cultural, and interpersonal skills necessary to manage IS projects successfully. Project scope management, schedule and cost management, quality management, and risk management. Course may be offered in classroom-based or hybrid format. 3 lectures. Formerly BUS 395.

BUS 3396 Consumer Insights (3 units)

Term Typically Offered: F, SP

Prerequisite: Graphics Communications major and GRC 361 or GRC 3030; or BUS 346 or BUS 3346.

Process of individuals selecting, purchasing, using, or disposing of products, services, ideas, or experiences, based upon psychology, sociology, cultural anthropology, semiotics, and micro/macro economics. Consumer experience through analysis of the consumer journey and touch points. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 396.

BUS 3396A Consumer Insights Project (1 unit)

Term Typically Offered: F, SP Corequisite: BUS 3396.

Completion of class project under faculty supervision that complements the coursework on consumer insights. Course offered online only. 1 activity.



BUS 3399 IT Infrastructure and Security Management (3 units)

Term Typically Offered: F, SP Prerequisite: BUS 391 or BUS 3391.

Fundamental concepts of networking and infrastructure management, including theoretical and practical discussion on TCP/IP, wired and wireless LAN, cloud computing, and information security. 3 lectures. Formerly BUS 399.

BUS 3399A IT Infrastructure and Security Management Project (1 unit)

Term Typically Offered: F, SP Corequisite: BUS 3399.

Selection and completion of a project under faculty supervision that complements the coursework on information technology (IT) infrastructure and security management. Course offered online only. 1 activity.

BUS 3411 Finance Practicum (1 unit)

Term Typically Offered: F, SP

Prerequisite: BUS 431 or BUS 3431; and one of the following: BUS 441, BUS 3440, or BUS 3441.

Trading strategies, back-testing, risk-return tradeoff, and industry best practices. Write a research project. Course maybe offered in classroom-based, online, or hybrid format. 1 activity.

BUS 3431 Security Analysis and Portfolio Management (4 units)

Term Typically Offered: F, SP

Prerequisite: One of the following: BUS 301, BUS 342, BUS 1342, or BUS 3343; one of the following: STAT 252, STAT 302, STAT 1220, or STAT 3520; and one of the following: ECON 339, ECON 3021, STAT 324, or STAT 3430.

In-depth analysis of financial markets. Various types of investments, including stocks, bonds, and other asset classes. Investment strategies, portfolio construction, diversification, and performance evaluation. 4 lectures. Formerly BUS 431.

BUS 3433 Global Financial Institutions and Markets (3 units)

Term Typically Offered: F, SP

Prerequisite: One of the following: BUS 301, 342, BUS 1342, or BUS 3343.

The role of financial markets and institutions in allocating capital globally and promoting international commerce. Financial institutions covered include the Federal Reserve Bank (FED), International Monetary Fund (IMF), World Bank, investment banks, and others. Detailed exploration of the history and functions of these institutions. Course may be offered in classroom-based or hybrid format. 3 lectures. Formerly BUS 433.

BUS 3438 Corporate Finance (4 units)

Term Typically Offered: F, SP

Prerequisite: One of the following: BUS 301, BUS 342, BUS 1342, or BUS 3343; and one of the following: STAT 252, STAT 302, STAT 1220, or STAT 3520.

Corporate finance with an emphasis on managing the corporation to create shareholder value. Valuation models, capital budgeting, capital structure, corporate distribution policy, financial distress, corporate governance, and mergers and acquisitions. Course may be offered in classroom-based, online, or hybrid format. 4 lectures. Formerly BUS 438.

BUS 3440 Financial Modeling and Visualization in Excel (4 units)

Term Typically Offered: F, SP

Prerequisite: BUS 431 or BUS 3431. Recommended: BUS 391 or BUS 3391.

Wealth planning and financial management. Analysis of financial problems. Excel's power query for data wrangling and analysis. Data visualization through dashboards. Course may be offered in classroom-based, online, or hybrid format. 3 lectures, 1 activity.



BUS 3441 Financial Modeling and Analytics in Python or R (4 units)

Term Typically Offered: F, SP Prerequisite: BUS 431 or BUS 3431.

Computer acquisition, processing, and visualization of financial data. Applied financial theory and analysis for financial decision making. Machine learning for analysis. Course may be offered in classroom-based, online, or hybrid format. 3 lectures, 1 laboratory. Formerly BUS 441.

BUS 3443 Case Studies in Finance (3 units)

Term Typically Offered: SP

Prerequisite: BUS 431 or BUS 3431.

Analysis and decision-making in applying finance theory to business management and valuation through cases. Valuation techniques and their application to business finance. Practical experience in the application of fundamental financial concepts and procedures to realistic business situations. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 443.

BUS 4312 Entrepreneurship Law (3 units)

Term Typically Offered: SP

Prerequisite: Junior standing or one of the following: BUS 207, BUS 220, BUS 310, BUS 311, BUS 2207, BUS 2220, BUS 3310, or BUS 3311.

Analysis of laws and legal strategies that affect startup enterprises, business innovation restrained or enhanced through law, founder's agreements, entity formation, securities laws, venture capital, intellectual property, employment law, contracts, e-commerce, and exit transactions. Course may be offered in classroom-based, online, or hybrid format. 3 lectures.

BUS 4400 Special Problems for Advanced Undergraduates (1-4 units)

Term Typically Offered: F, SP, SU

Prerequisite: Senior standing and consent of instructor.

Individual investigation, research, studies, or surveys of selected problems. Repeatable up to 4 units. Formerly BUS 400.

BUS 4401 Strategic Management (3 units)

Term Typically Offered: F, SP

Prerequisite: Senior standing; one of the following: BUS 301, BUS 342, BUS 1342, or BUS 3343; BUS 207 or BUS 2207; BUS 215 or BUS 2215; BUS 346 or BUS 3346; BUS 387 or BUS 3387; BUS 391 or BUS 3391; one of the following: ITP 303, ITP 326, ITP 330, ITP 341, ITP 371, ITP 3303, ITP 3326, ITP 3330, ITP 3341, or ITP 3371. Concurrent: BUS 4411. Recommended: BUS 4404.

Application of interdisciplinary skills to strategic management. Consideration of interdependence between external environments and internal systems. Focus on responsibilities, tasks, and skills of general managers, including environmental sustainability, social responsibility and governance. Case studies, group problem solving, experiential class activities. Course may be offered in classroom-based, online, or hybrid format. 3 seminars. Formerly BUS 401.

BUS 4404 Law, Governmental, and Social Influences on Business (3 units)

Term Typically Offered: F, SP, SU Prerequisite: BUS 207 or BUS 2207.

Complex legal analysis for business. Legal, economic, political, societal, and ethical perspectives. Administrative law, agencies-regulatory policy, antitrust law, disclosure documents, transactional relations, public policy, business-government relations, compliance, risk avoidance, and corporate responsibility. Case studies. Course offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 404.

BUS 4405 Leadership and Group Dynamics (3 units)

Term Typically Offered: F Prerequisite: Senior standing.

Offered at Solano Campus. Behavioral and psychological aspects of leadership in the business environment are the focus of this course. Behavioral concepts include practical training in followership, development of skills in leadership, communication, team membership, and management of personal stress. Psychological concepts include attitude development, corporate culture values, and personality assessment. 3 lectures. Formerly BUS 405 at Cal Maritime.



BUS 4408 Innovation and Entrepreneurship Through Disruptive Technologies (4 units)

Term Typically Offered: SP

Prerequisite: BUS 310 or BUS 3310.

Theory of disruptive innovation and its use in creating business and entrepreneurial opportunity. Basic technical underpinnings of disruptive technologies, including artificial intelligence, autonomous vehicles, Internet of Things, augmented and virtual reality, machine learning, and genetic engineering. Field trip may be required. 4 seminars. Formerly BUS 408.

BUS 4409 Law of Real Property and Real Estate (3 units)

Term Typically Offered: SU Prerequisite: Junior standing.

Acquisition, ownership, financing, transfer, and impairment of real property. Contracts, agency, estates, co-ownership, mortgages, and deeds. Covenants, conditions, and restrictions (CC&Rs), easements, landlord-tenant, and zoning. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 409.

BUS 4410 The Legal Environment of International Business (3 units)

Term Typically Offered: SP

Prerequisite: BUS 207 or BUS 2207.

United States, foreign, and international law affecting international business transactions. United States and foreign cultural, ethical, and political norms and legal institutions, and their effect on law and business. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 410.

BUS 4411 BSBA Assurance of Learning Assessment (0 units)

Term Typically Offered: F, SP

CR/NC

Concurrent: BUS 4401.

Assessment of BS Business Administration Program Learning Objective 1 (Apply knowledge to identify opportunities and solve business problems) through completion of an exam and the senior exit survey. Results will only be used to improve the curriculum. Credit/No Credit grading only. Course offered online only. Formerly BUS 411.

BUS 4416 Strategic Sourcing and Procurement Management (3 units)

Term Typically Offered: F, SP Prerequisite: ITP 371 or ITP 3371.

Strategic sourcing and procurement within the context of supply chain operations. Purchasing and sourcing strategies, contract management, supplier selection and evaluation, e-procurement, global sourcing, outsourcing, supplier relationships, pricing, negotiation, risk management, and warehouse operations. Field trip may be required. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Crosslisted as BUS/ITP 4416.

BUS 4417 Supply Chain Analytics (3 units)

Term Typically Offered: F, SP

Prerequisite: BUS 391 or BUS 3391; ITP 371 or ITP 3371; and STAT 252 or STAT 1220.

Application of quantitative methods (e.g., regression, linear programming) to optimize decisions in transportation, inventory, and demand. Use of software and business intelligence tools to analyze and interpret supply chain data. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Crosslisted as BUS/ITP 4417.

BUS 4418 Marketing Research (3 units)

Term Typically Offered: F, SP Prerequisite: BUS 346 or BUS 3346.

Framework and application of the marketing research process. Development of skills to design, gather, analyze, and present information for marketing decision-making. Focus on primary data collection and analytical techniques to address research questions for customer insights. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 418.



BUS 4418A Marketing Research Project (1 unit)

Term Typically Offered: F, SP Corequisite: BUS 4418.

Project designed for conducting marketing research activities to discover customer insights. Application of marketing research concepts, selection of research forms and methodologies, as well as data collection, analysis, and interpretation. Complements the coursework on marketing research. Course offered online only. 1 activity.

BUS 4421 Marketing Analytics (3 units)

Term Typically Offered: SP, SU Prerequisite: BUS 346 or BUS 3346.

Analysis of customer information using a broad range of tools and techniques. Application of analytic findings to marketing decision-making. Integration of data into reporting platforms that emphasize return on marketing investment. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 421.

BUS 4421A Marketing Analytics Activity (1 unit)

Term Typically Offered: F, SP, SU

Corequisite: BUS 4421.

Analysis of customer information using a broad range of tools and techniques. Application of analytic findings to marketing decision-making. Integration of data into reporting platforms that emphasize return on marketing investment. Complements the coursework on marketing analytics. Course offered online only. 1 activity.

BUS 4423 Digital Marketing (3 units)

Term Typically Offered: F, SP

Prerequisite: BUS 396 or BUS 3396; and BUS 418 or BUS 4418.

Measurement and optimization of digital marketing. Return on investment, lifetime value of the customer, customer acquisition costs, search engine marketing, paid search, display advertising, website analytics, email marketing, social media marketing, online reputation, mobile marketing, and new media marketing. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 423.

BUS 4423A Digital Marketing Activity (1 unit)

Term Typically Offered: F, SP Corequisite: BUS 4423.

Measurement and optimization of digital marketing. Return on investment, lifetime value of the customer, customer acquisition costs, search engine marketing, paid search, display advertising, website analytics, email marketing, social media marketing, online reputation, mobile marketing, and new media marketing. Complements the coursework on digital marketing metrics and management. Course offered online only. 1 activity.

BUS 4424 Advanced Data Analytics in Accounting (3 units)

Term Typically Offered: F, SP

Prerequisite: BUS 320 and BUS 3320; and BUS 322 or BUS 3322.

Application of analytical, technical and software skills to solve complex accounting-related business decisions, identify trends and effectively visualize data results involving accounting, auditing or taxation. Course may be offered in classroom-based, online, or hybrid format. 3 lectures.

BUS 4425 Advanced Managerial Accounting with Data Analytics (3 units)

Term Typically Offered: SP

Prerequisite: BUS 215 or BUS 2215.

Costing systems, including job, process, and activity-based costing systems. Cost allocation and differential analysis of cost information for decision making. Organization, visualization, and analysis of relevant financial and cost data to assist managers in making strategic business decisions. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 412.



BUS 4426 Taxation of Corporations and Partnerships (3 units)

Term Typically Offered: F, SP, SU

Prerequisite: BUS 214 or BUS 2214 and BUS 215 or BUS 2215 with grades of C- or better; or AGB 214 or AGB 2214 and AGB 323 or AGB 3323 with grades of C- or better, and Accounting minor.

Comparative study of the taxation of C corporations and flow-through tax entities, including S corporations, partnerships, and limited liability companies, with a primary emphasis on C corporations and partnerships. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 417.

BUS 4427 Advanced Financial Reporting (3 units)

Term Typically Offered: SP

Prerequisite: BUS 322 or BUS 3322.

Intercompany investments and consolidations. Advanced financial accounting, including foreign currency transactions, government and not-for-profit accounting, segment disclosures and interim financial reporting, and data analytics and blockchain technology. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 323.

BUS 4428 Independent Study in Accounting (3 units)

Term Typically Offered: TBD Prerequisite: Consent of instructor.

Individual investigation, research, study or survey of selected topics in accounting, auditing, or taxation. Repeatable up to 6 units. Formerly BUS 474.

BUS 4430 Internship/Cooperative Education (1-9 units)

Term Typically Offered: F, SP, SU

CR/NC

Prerequisite: Junior standing; Cal Poly cumulative GPA of at least 2.5 without being on academic probation; and approval of area chair.

Work experience in business, government, or non-profit sector that provides an opportunity to explore career interests while applying knowledge and skills learned in the classroom in a work setting. Periodic written progress reports, final report, and periodic evaluation by work supervisor required. Credit/No Credit grading only. Repeatable up to 9 units. Formerly BUS 430.

BUS 4434 Real Estate Finance (4 units)

Term Typically Offered: F, SP Prerequisite: BUS 431 or BUS 3431.

Theory and applications of real estate business operations. Cash flow analysis, zoning, internal rate of return, mortgages, securitization, and leverage. Course may be offered in classroom-based, online, or hybrid format. 4 lectures. Formerly BUS 434.

BUS 4437 Retirement and Estate Planning (3 units)

Term Typically Offered: TBD Prerequisite: BUS 431 or BUS 3431.

Retirement planning and employee benefits, including Social Security and Medicare, types of retirement plans, qualified plan characteristics, distribution options, trusts, power of attorney, and probate. Course may be offered in classroom-based or hybrid format. 3 lectures. Formerly BUS 437.

BUS 4439 Fixed Income Securities Market (3 units)

Term Typically Offered: F, SP Prerequisite: BUS 431 or BUS 3431.

Value fixed-income securities with or without embedded options using interest rate term structure. Measure and manage risks associated with investing in fixed-income securities with emphasis on interest rate and credit risks, and bond portfolio strategies. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 439.



BUS 4442 Introduction to Futures and Options (3 units)

Term Typically Offered: SP

Prerequisite: BUS 441, BUS 3440, or BUS 3441.

Introduction to options, futures, and other derivative securities. Examination of institutional aspects of the markets. Theories of pricing. Discussion of trading strategies (arbitrage, hedging, and spread). Applications for asset and risk management. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 442.

BUS 4445 Risk Management and Insurance Planning (3 units)

Term Typically Offered: F, SP Prerequisite: BUS 431 or BUS 3431.

Risk management and insurance planning. Planning need for households and businesses. Concepts include determining risk exposure, insurance selection and details of property and liability, life, health, and social insurance products. Course may be offered in classroom-based or hybrid format. 3 lectures. Formerly BUS 445.

BUS 4446 International Marketing (3 units)

Term Typically Offered: SP

Prerequisite: BUS 346 or BUS 3346.

Development of an understanding of global marketing strategy. Acquisition of information about international markets and its use to describe customers, understand markets, and make marketing mix decisions. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 446.

BUS 4446A International Marketing Project (1 unit)

Term Typically Offered: SP Corequisite: BUS 4446.

Projects on international markets and international marketing strategies. Complements the coursework on international marketing. Course offered online only. 1 activity.

BUS 4447 Defining and Building Technology Startups (4 units)

Term Typically Offered: F

Prerequisite: BUS 3310; and Entrepreneurship concentration or Entrepreneurship minor.

Topics in entrepreneurial settings focusing on technology startups. Frameworks, analytical skills, and decision-making tools used in developing entrepreneurial business ideas and products. Ideation, customer development, and product definition. The Class Schedule will list topic selected. 4 discussions.

BUS 4448 Mergers and Acquisitions (4 units)

Term Typically Offered: SP

Prerequisite: BUS 438 or BUS 3438.

Comprehensive coverage of financial aspects concerning mergers and acquisitions. Valuation of companies and synergies, strategic and other motivations underlying mergers, structuring of transactions, deal tactics and strategy, and leveraged buyouts. Course may be offered in classroom-based, online, or hybrid format. 4 lectures. Formerly BUS 448.

BUS 4449 New Venture Growth and Scaling (4 units)

Term Typically Offered: SP

Prerequisite: BUS 310 or BUS 3310.

Hands-on understanding of how a new venture moves from a start-up and scales into a fast-growth company. Explore crossing the chasm from an early-adopter market to adjacent markets where fast growth occurs. Adopting systems, processes, and technologies that enable scaling. Course may be offered in classroom-based or hybrid format. 4 seminars.



BUS 4450 Current Topics in Marketing (3 units)

Term Typically Offered: F, SP

Prerequisite: BUS 396 or BUS 3396; and BUS 418 or BUS 4418.

Exploration of emerging technologies and best practices in marketing. Tools, techniques, and strategies that are transforming the marketing landscape. Development of skills to design, implement, and optimize marketing campaigns through a combination of lectures, case studies, video campaigns, hands-on exercises, guest lectures, group projects, and simulations. The Class Schedule will list subtitle selected. Repeatable up to 6 units. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 450.

BUS 4450A Current Topics in Marketing Activity (1 unit)

Term Typically Offered: F, SP Corequisite: BUS 4450.

Additional projects, research, and activities to explore emerging technologies and best practices in marketing. Complements the coursework on topics in marketing activity. The Class schedule will list subtitle selected. Repeatable up to 2 units. Course offered online only. 1 activity.

BUS 4451 New Product Development and Launch (3 units)

Term Typically Offered: F

Prerequisite: BUS 418 or BUS 4418; and STAT 252 or STAT 1220.

Frameworks for developing new products and planning for their launch. Major phases of product development, including innovation strategy, idea generation and screening, concept development and evaluation, prototyping, and market acceptance testing. Introduction to product launch, including segmentation, targeting, positioning, pricing, and branding. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 451.

BUS 4451A New Product Development and Launch Project (1 unit)

Term Typically Offered: F Corequisite: BUS 4451.

Project-based skills for developing new products and planning for their launch. Application of major phases of product development, including innovation strategy, idea generation and screening, concept development and evaluation, prototyping, and market acceptance testing. Course offered online only. 1 activity.

BUS 4453 Digital and New Media Marketing (3 units)

Term Typically Offered: F, SP

Prerequisite: One of the following: BUS 396, BUS 418, BUS 3396, or BUS 4418.

Applications and tools of digital and new media marketing communications, including ad purchasing, optimization of sites, social media audits, and effective governance. Develop integrated marketing communication strategies across varied digital media channels that reflect a client organization's strategy for managing its business goals, identity, and reputation. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 453.

BUS 4453A Digital and New Media Marketing Project (1 unit)

Term Typically Offered: F, SP, SU

Corequisite: BUS 4453.

Complements the coursework on digital and new media marketing. Course offered online only. 1 activity.

BUS 4454 Marketing Projects (3 units)

Term Typically Offered: F, SP

Prerequisite: BUS 396 or BUS 3396; and BUS 418 or BUS 4418.

Client-based course providing an opportunity to apply marketing abilities. Teams draw upon research, analytical, and strategic marketing skills to develop an actionable plan that addresses a critical marketing challenge faced by an organization. Deliverables include research findings and written and verbal presentation to the organization and instructor. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 454.



BUS 4454A Marketing Projects Activity (1 unit)

Term Typically Offered: F Corequisite: BUS 4454.

Completion of class project under faculty supervision that complements the coursework on marketing projects. Course may be offered in classroom-based, online, or hybrid format. 1 activity.

BUS 4455 Marketing Strategy (3 units)

Term Typically Offered: F, SP

Prerequisite: BUS 396 or BUS 3396; and BUS 418 or BUS 4418.

Key marketing concepts. Strategic and tactical marketing decisions for companies and brands. Marketing performance assessments and alignment to the market. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 455.

BUS 4455A Marketing Strategy Project (1 unit)

Term Typically Offered: F, SP Corequisite: BUS 4455.

Application of key marketing concepts using computer simulations. Development, evaluation, and implementation of marketing strategies, including environmental analysis, identification of marketing problems and opportunities, corporate growth strategies designed to exploit opportunities and counter threats, decisions regarding allocations of resources, and evaluation and control of the strategic plan. Course offered online only. 1 activity.

BUS 4457 Integrated Marketing Communications (3 units)

Term Typically Offered: SP

Prerequisite: BUS 396 or BUS 3396; and BUS 418 or BUS 4418.

Advertising and promotions directed at the consumer. Theoretical background to plan, execute, and measure the effectiveness of advertising and promotions in a variety of contexts. Course may be offered in classroom-based, online, or hybrid format. 3 lectures.

BUS 4457A Integrated Marketing Communications Project (1 unit)

Term Typically Offered: F Corequisite: BUS 4457.

Plan, execute, and measure the effectiveness of advertising and promotions in a variety of contexts. Complements the coursework on integrated marketing communications (IMC). Course offered online only. 1 activity.

BUS 4458 Solving Big World Challenges (4 units)

Term Typically Offered: F, SP

Prerequisite: Completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs).

Apply human-centered design practices to address a social or an environmental challenge, specific to a local community. Achieve revenue-generating social impact through innovative business models. Practice team competencies, including problem-solving, interviewing, brainstorming, prototyping, and written, visual, and oral communication. 4 discussions. Crosslisted as BUS/COMS 4458. Formerly BUS/COMS 458.

BUS 4461 Senior Project I (2 units)

Term Typically Offered: F, SP, SU

Prerequisite: Senior standing and consent of instructor.

Selection and analysis of a business problem under faculty supervision. Problems typical of those which graduates must solve in their fields of employment. Formal report is required. Formerly BUS 461.

BUS 4462 Senior Project II (2 units)

Term Typically Offered: F, SP, SU

Prerequisite: Senior standing and consent of instructor.

Completion of the faculty-supervised analysis of a business problem typical of those which graduates must solve in their fields of employment. Formal report is required. Formerly BUS 462.



BUS 4464 Applied Senior Project Seminar (3 units)

Term Typically Offered: F, SP, SU Prerequisite: Senior standing.

Selection and analysis of business problems and opportunities in directed individual or group-based projects. Problems typical to those which graduates could encounter in their fields of employment. Formal report required. Course may be offered in classroom-based, online, or hybrid format. 3 seminars. Formerly BUS 464.

BUS 4465 Senior Project: Building and Launching the Technology Startup (4 units)

Term Typically Offered: SP

Prerequisite: Senior standing and BUS 4447.

Entrepreneurial settings focusing on technology startups. Frameworks, analytical skills, and decision-making tools used in launching entrepreneurial businesses. 4 discussions. Formerly BUS 487.

BUS 4466 Sales Practicum (4 units)

Term Typically Offered: TBD

Prerequisite: BUS 348 or BUS 3348.

Capstone course for the Sales minor. Exploration of building and maintaining relationships, apply selling skills, and prepare for a career in professional selling. 4 seminars. Formerly BUS 466.

BUS 4467 Senior Project: Growing the Early Stage Startup (4 units)

Term Typically Offered: SP

Prerequisite: Senior standing and BUS 488 or BUS 4488.

Uses regional startups as learning labs. Process of identifying and conducting business model experiments aimed at getting traction in the marketplace. Exploration of a personal entrepreneurial pathway. 4 seminars.

BUS 4468 Blockchain in Finance (3 units)

Term Typically Offered: TBD

Prerequisite: BUS 441 or BUS 3441. Recommended: One of the following: CSC 101, CSC 232, CSC 1001, CSC 1032, ECON 395, or ECON 3015.

Blockchain technology in finance with application examples, including stock trading, real estate transactions, and peer-to-peer (P2P) payment systems. Smart contract basics and solidity programming. 3 lectures. Formerly BUS/ITP 468.

BUS 4469 Foundations of Financial Technology (3 units)

Term Typically Offered: TBD

Prerequisite: BUS 441 or BUS 3441. Recommended: One of the following: CSC 101, CSC 232, CSC 1001, CSC 1032, ECON 395, or ECON 3015.

Introduction to financial technology and its landscapes. Theoretical foundations, including machine-learning, blockchain, cryptocurrencies, and platforms as well as a set of industry cases studies and practices. Course may be offered in classroom-based or online format. 3 lectures. Formerly BUS 469.

BUS 4470 Special Advanced Topics (1-4 units)

Term Typically Offered: TBD Prerequisite: Consent of instructor.

Directed group study of special topics for advanced students. The Class Schedule will list topic selected. Repeatable up to 8 units. Course may be offered in classroom-based, online, or hybrid format. 1 to 4 lectures. Formerly BUS 470.



BUS 4472 Senior Project: Volunteer Income Tax Assistance (3 units)

Term Typically Offered: SP

Prerequisite: Senior standing and BUS 320 or BUS 3320.

Training and practice in preparation of state and federal individual income tax returns. Coverage of deductions and credits applicable to individuals. Students provide free tax assistance and income tax preparation to community residents under supervision of qualified professionals. 1 lecture, 2 activities. Formerly BUS 416.

BUS 4473 Senior Project: Auditing Analytics (3 units)

Term Typically Offered: SP

Prerequisite: Senior standing and BUS 425 or BUS 3323.

Covers various analytical methodologies, tools and technology-related innovations used in audit engagements, including sampling, internal controls, and business cycle specific audit approaches using specialized audit applications, visualization software, and other applicable tools. Course may be offered in classroom-based, online, or hybrid format. 3 lectures.

BUS 4474 Senior Project: Low Income Taxpayer Clinic (3 units)

Term Typically Offered: F, SP

Prerequisite: Senior standing; BUS 320 or BUS 3320; Graduation Writing Requirement (GWR); and consent of instructor.

Acquire fundamental knowledge of federal tax laws and procedures in a clinical setting. Assist Low Income Taxpayer Clinic clients. Formerly BUS 463.

BUS 4475 Rewarding and Compensating Employee Performance (3 units)

Term Typically Offered: SP

Prerequisite: BUS 384 or BUS 384; and one of the following: STAT 252, STAT 1220, ECON 339, or ECON 3021.

Design and management of total compensation systems. Interrelationship among employee performance, intrinsic and extrinsic rewards, perceived equity, and employee attitudes and behaviors. Employee benefits, wage fairness, and employee incentive programs. Course may be offered in classroom-based or online format. 3 lectures. Formerly BUS 471.

BUS 4476 Leading Social Innovation (3 units)

Term Typically Offered: SP

Prerequisite: Completion of GE Area 1 with grades of C- or better (GE Area A for the 2022-26 catalog).

Fundamentals and practice of leading social innovation in existing and new organizations. Emphasis on social movement and collective action tools and theory that support the development and implementation of social initiatives. 3 lectures. Formerly BUS 476.

BUS 4477 Management Consulting, Change, and Development (3 units)

Term Typically Offered: SP

Prerequisite: BUS 387 or BUS 3387.

Management consulting models and challenges associated with designing and leading organizational transformation. Application of behavioral and organizational science knowledge and social technology as intervention change strategies to enhance organization effectiveness and sustainability. Principles of management consulting and organization development. 3 lectures. Formerly BUS 477.

BUS 4477A Change Management Project (1 unit)

Term Typically Offered: TBD Corequisite: BUS 4477.

Advanced application of topics and procedures relevant to managing change in organizations. Individual and group projects or simulations. Complements the coursework on change management. Course may be offered in classroom-based, online, or hybrid format. 1 activity.



BUS 4480 People Analytics (3 units)

Term Typically Offered: SP

Prerequisite: One of the following: BUS 384, BUS 387, BUS 3884, or BUS 3387; and one of the following: STAT 252, STAT 1220, ECON 339, or ECON 3021.

Data-informed strategic approach to developing and evaluating human resource systems and practices with emphasis on question formulation, data acquisition, management, analysis, and storytelling. 3 lectures. Formerly BUS 480.

BUS 4481 Advanced Topics in Management and Human Resources (3 units)

Term Typically Offered: SP

Prerequisite: BUS 384 or BUS 3384; and BUS 387 or BUS 3387.

Advanced topics in emerging areas of management and/or human resources. Intended for students in the Management and Human Resources concentration who want to learn and acquire in-depth knowledge and skills on contemporary topics. The Class Schedule will list subtitle selected. Repeatable up to 6 units. Course may be offered in classroom-based or online format. 3 lectures.

BUS 4486 Social Media Text Mining (3 units)

Term Typically Offered: SP

Prerequisite: BUS 392 or BUS 3392.

Analysis of large unstructured text data from social media to generate business insights. Natural language processing, document representation, text clustering, text classification, and topic modeling. Mathematical theories and practical computer-based tools will be introduced. Course may be offered in classroom-based, online, or hybrid format. 3 lectures.

BUS 4488 Building a Startup Skill Set (4 units)

Term Typically Offered: F

Prerequisite: BUS 310 or BUS 3310. Recommended: BUS 330 and ITP 406 or BUS 3330 and ITP 4406.

Process of evolving a startup's business model, focusing on product-market fit, go-to-market strategies, revenue streams, cost structure, partnerships, key activities, and key resources. 4 seminars. Formerly BUS 488.

BUS 4489 Negotiation (3 units)

Term Typically Offered: F, SP Prerequisite: BUS 387 or BUS 3387.

Theory and practice of negotiation in multiple contexts, including labor relations, compensation, and business disputes. Impact of culture, ethics, dispute resolution, and coalitions to develop integrative solutions. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 489.

BUS 4489A Negotiation Project (1 unit)

Term Typically Offered: F, SP Corequisite: BUS 4489.

Advanced application of topics and strategies relevant to negotiations. Individual and group projects or simulations aimed at applying relevant knowledge to enhance conflict management skills. Designed to build on and complement coursework on negotiations. Course may be offered in classroom-based, online, or hybrid format. 1 activity.

BUS 4490 Data Visualization (3 units)

Term Typically Offered: SP

Prerequisite: BUS 497 or BUS 4497.

Fundamentals and practice of data visualization with an emphasis on storytelling within organizations. Theoretical focus on human cognition and perception. Application of principles through software tools. 3 lectures. Formerly BUS 490.



BUS 4492 Technology-Supported Collaboration (3 units)

Term Typically Offered: TBD

Prerequisite: BUS 387 or BUS 3387; and BUS 391 or BUS 3391.

Collaboration from multiple perspectives, applying best practices and empirically-supported insights toward successful collaboration in organizational settings. Theories of teams, collaboration, and the technologies to support these processes. Application of techniques for leadership, problem solving, communications, virtual collaboration, and collaboration technologies. 3 lectures. Formerly BUS 492.

BUS 4493 User Experience Analysis and Design (3 units)

Term Typically Offered: SP

Prerequisite: BUS 394 or BUS 3394.

Fundamentals of user experience analysis and design. Best practices in mobile/web/desktop user interfaces. Persona development. Prototyping using software tools, including theoretical and practical discussion of user experience analysis and design in business settings. Course may be offered in classroom-based or hybrid format. 3 lectures. Formerly BUS 493.

BUS 4496 Software Testing (3 units)

Term Typically Offered: TBD Prerequisite: BUS 392 or BUS 3392.

Theory and practice of software testing, including state-of-the-art practices, design issues, staffing issues, test management issues, and other related areas. Software testing tools utilized for applications testing, and test management. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 495.

BUS 4497 Business Analytics (3 units)

Term Typically Offered: SP, SU

Prerequisite: One of the following: STAT 252, STAT 301, STAT 1220, or STAT 1510.

Introduction to the concepts and applications of business analytics, using business case study and problem-solving approach. Data warehouse design and implementation. Supervised learning techniques for classification and prediction. Unsupervised learning techniques for dimension reduction and pattern recognition. Text analytics. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 497.

BUS 4497A Business Analytics Project (1 unit)

Term Typically Offered: F, SP Corequisite: BUS 4497.

Selection and completion of one or more projects under faculty supervision that complements the coursework on business analytics. Course offered online only. 1 activity.

BUS 4498 Directed Topics in Information Systems (3 units)

Term Typically Offered: F, SP Prerequisite: BUS 392 or BUS 3392.

Specialized Information Systems (IS) topic selected from the IS areas of current interest. Intended for advanced IS concentration students who want to learn and acquire in-depth IS knowledge and skills. The Class Schedule will list subtitle selected. Repeatable up to 9 units. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly BUS 498.

BUS 4499 Data Communications and Networking (3 units)

Term Typically Offered: F, SP Prerequisite: BUS 391 or BUS 3391.

Combines concepts of data communications and networking with practical applications in business. Technical and managerial aspects of business telecommunication. Introduction to data communications, applications and technical fundamentals, network products, technologies, applications, and services. Course may be offered in classroom-based or hybrid format. 3 lectures. Formerly BUS 499.



ECO Courses

ECO 1100 Macroeconomics (3 units)

Term Typically Offered: F, SP 2026-28 or later catalog: GE Area 4B 2020-26 catalogs: GE Area D2

Offered at Solano Campus. Basic economic methodology, analysis, and policy. Economic institutions, organizations and industrial structure, the monetary system. Measurement, determination and stability of national income. Monetary, fiscal and balance of payment problems and policies. 3 lectures. Fulfills GE Area 4B (GE Area D2 for students on the 2020-26 catalogs).

ECO 1101 Microeconomics (3 units)

Term Typically Offered: SP 2026-28 or later catalog: GE Area 4B 2020-26 catalogs: GE Area D2

Prerequisite: MTH 101 or MTH 1101; and ECO 100 or ECO 1100.

Offered at Solano Campus. Analysis of the allocation of resources and costs of production, elasticity and utility theory. Introductory analysis of the determination of prices and output in different market situations, competition and monopoly and the role of public policy, and comparative economic systems. 3 lectures. Fulfills GE Area 4B (GE Area D2 for students on the 2020-26 catalogs).

ECON Courses

ECON 2001 Survey of Economics (3 units)

Term Typically Offered: F, SP 2026-28 or later catalog: GE Area 4B 2020-26 catalogs: GE Area D2

Basic principles of microeconomics and macroeconomics. Emphasis on applications to current local, national and global economic issues. Course may be offered in classroom-based or hybrid format. 3 lectures. Crosslisted as ECON/HNRS 2001. Fulfills GE Area 4B (GE Area D2 for students on the 2020-26 catalogs). Formerly ECON/HNRS 201.

ECON 2021 Using Big Data to Solve Economic and Social Problems (3 units)

Term Typically Offered: F, SP

Introduction to basic methods in empirical economic analysis, including regression, causal inference, and machine learning. Applications of the methods to equality of opportunity, education, racial disparities, innovation and entrepreneurship, health care, climate change, criminal justice, and tax policy. Course may be offered in classroom-based or hybrid format. 3 lectures. Formerly ECON 202.

ECON 2030 Microeconomics (3 units)

Term Typically Offered: F, SP

Microeconomic principles. Marginal and equilibrium analysis of commodity and factor markets in determination of price and output. Normative issues of efficiency and equity. 3 lectures. Formerly ECON 221.

ECON 2040 Macroeconomics (3 units)

Term Typically Offered: F, SP 2026-28 or later catalog: GE Area 4B 2020-26 catalogs: GE Area D2

Introduction to macroeconomics including aggregate output, employment, inflation, and economic growth. Money and the monetary system.

Macroeconomic policy including fiscal and monetary policy. 3 lectures. Fulfills GE Area 4B (GE Area D2 for students on the 2020-26 catalogs). Formerly ECON 222.



ECON 3015 Programming for Economics and Analytics (3 units)

Term Typically Offered: F, SP Prerequisite: Junior standing.

Basic principles of algorithmic problem solving and computer programming for economics and business analytics applications. Functions, classes, iteration, recursion, and data structures. Testing and debugging. Design of algorithms and algorithmic complexity. Stochastic programs. Graph optimization and economic applications. 3 lectures. Formerly ECON 395.

ECON 3015A Programming for Economics and Analytics Project (1 unit)

Term Typically Offered: F, SP Corequisite: ECON 3015.

Completion of class project under faculty supervision that complements the coursework on programming for economics and analytics. Course offered online only. 1 activity.

ECON 3021 Econometrics (4 units)

Term Typically Offered: F, SP

Prerequisite: ECON 221 or ECON 2030 and ECON 222 or ECON 2040, or ECON 201 or ECON 2001; and one of the following: MATH 121, MATH 141, MATH 221, MATH 1261, MATH 1264, or MATH 1267; and one of the following: STAT 252, STAT 301, STAT 1510, or STAT 1220.

Statistical methods applied to economic data to analyze relationships among variables, test economic theories, and predict outcomes. 4 lectures. Formerly ECON 339.

ECON 3030 Intermediate Microeconomics (4 units)

Term Typically Offered: F, SP

Prerequisite: One of the following: ECON 201, ECON 221, ECON 2001, or ECON 2030; and one of the following: MATH 121, MATH 141, MATH 1261, or DATA/MATH 1264. Corequisite: One of the following: MATH 123, MATH 241, DATA/MATH 1265, or MATH 2263.

Consumer behavior and the theory of demand. Production, cost, supply functions, perfect competition, monopoly and oligopoly, game theory, information economics, and factor markets. 4 lectures. Formerly ECON 311.

ECON 3039 Microeconomics for Business and Public Policy (3 units)

Term Typically Offered: F, SP

Prerequisite: One of the following: ECON 201, ECON 221, ECON 2001, or ECON 2030; and one of the following: MATH 121, MATH 141, MATH 221, MATH 1261, DATA/MATH 1264, or MATH 1267.

Consumer behavior and the theory of demand. Production, cost, supply functions, perfect competition, monopoly and oligopoly, information technology, externalities, and public goods. Not open to students with credit in ECON 311 or ECON 3030. 3 lectures.

ECON 3040 Intermediate Macroeconomics (4 units)

Term Typically Offered: F, SP

Prerequisite: One of the following: ECON 201, ECON 222, ECON 2001, or ECON 2040. Corequisite: ECON 311 or ECON 3030.

Study of the macroeconomy, macroeconomic theories, and macroeconomic policies. Nature of growth. Business cycles. Money and inflation. Fiscal policy. Monetary policy. Financial crises. 4 lectures. Formerly ECON 313.

ECON 3041 Money, Banking and Credit (3 units)

Term Typically Offered: F, SP

Prerequisite: One of the following: ECON 201, ECON 222, ECON 2040, or ECON 2001.

Financial markets and institutions. Structure of the banking industry and impacts of technological change in banking. Structure and operations of the Federal Reserve. Impacts of monetary policy on the economy. 3 lectures. Formerly ECON 337.



ECON 3050 The Economics of Equity and Social Welfare (4 units)

Term Typically Offered: F, SP

Prerequisite: ECON 311 or ECON 3030.

Distributive justice and fairness in resource allocation. Welfare properties of exchange and production economies. Welfare properties of economies with externalities and public goods. The measurement of well-being and inequality. Economic inequality, common pool resources, and climate change. 4 lectures. Formerly ECON 312.

ECON 3061 International Trade Theory (3 units)

Term Typically Offered: SP

Prerequisite: ECON 221 or ECON 2030 and ECON 222 or ECON 2040; or ECON 201 or ECON 2001.

Theory of comparative advantage, gains from trade, and recent developments in trade theory. Examination of tariffs, quotas, exchange controls, other trade barriers and underlying policy issues. Review of U.S. commercial policy, General Agreement on Tariffs and Trade (GATT), the common market, regional and world economic organizations. Not open to students with credit in ECON 404 or ECON 4061. 3 lectures. Formerly ECON 330.

ECON 3071 Environmental and Natural Resource Economics (3 units)

Term Typically Offered: TBD

2026-28 or later. Upper-Div GE Area 4 2020-26 catalogs: Upper-Div GE Area D

Prerequisite: Completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs); completion of GE Area 2 with a grade of C- or

better (GE Area B4 for the 2020-26 catalogs); and ECON 201 or ECON 2001, or ECON 221 or ECON 2030 and ECON 222 or ECON 2040.

Economics of environmental resource management. Conservation, sustainability, and dynamic efficiency in natural resources. Effects of property rights and economic incentives on environmental and economic systems. Design of local and global environmental policies to align market outcomes with social welfare goals. Not open to students with credit in ECON 4062, ECON 431, or ECON 4071. 3 lectures. Fulfills GE Upper-Division 4 (GE Area Upper-Division D for students on the 2020-26 catalogs).

ECON 3081 Comparative Economic Systems (3 units)

Term Typically Offered: F, SP

2026-28 or later. Upper-Div GE Area 4 2020-26 catalogs: Upper-Div GE Area D

Prerequisite: Junior standing; completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs); completion of GE Area 2 with a grade of C- or better (GE Area B4 for the 2020-26 catalogs); and one of the following: ECON 201, ECON 202, ECON 2001, or ECON 2040.

Exploration of economic systems as frameworks for decision-making in production, distribution, and consumption. Examination of how different systems-market-based, government-controlled, and mixed-affect income distribution, resource allocation, and overall economic well-being. 3 lectures. Fulfills GE Upper-Division 4 (GE Area Upper-Division D for students on the 2020-26 catalogs). Formerly ECON 304.

ECON 4010 Mathematical Economics (3 units)

Term Typically Offered: SP

Prerequisite: ECON 311 or ECON 3030.

Mathematical techniques employed in microeconomic and macroeconomic theory, with applications to specific economic models in a variety of economic fields. Use of multivariate calculus and linear algebra in formulating economic models. 3 lectures. Formerly ECON 408.

ECON 4010A Mathematical Economics Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4010.

Use of mathematical techniques employed in microeconomic and macroeconomic theory. Application of mathematical techniques to study economic problems. Course offered online only. 1 activity.



ECON 4011 Optimization in Julia for Economics and Data Science (3 units)

Term Typically Offered: F

Prerequisite: One of the following: ECON 395, CSC 101, CSC 231, CSC 232, ECON 3015, CSC 1001, CSC 1031 or CSC 1032.

Optimization as a foundation for Economics and Data Science, using the Julia environment. Constrained and unconstrained least squares via QR factorization. Duality. Applications to game theory, resource allocation, econometrics, and machine learning. 3 lectures. Crosslisted as DATA/ECON 4011.

ECON 4011A Julia for Data Analysis Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4011.

Completion of coding exercises for data analysis in Julia under faculty supervision that complements the coursework on optimization in Julia for economics and data science. Course offered online only. 1 activity. Crosslisted as DATA/ECON 4011A.

ECON 4012 Probability Models for Economic Decisions (3 units)

Term Typically Offered: F

Prerequisite: ECON 311 or ECON 3030.

Decision making in complex, realistic situations. Simulating discrete and continuous, independent and correlated, random variables. Decision making under risk and uncertainty. Adverse selection, moral hazard, and risk sharing. Dynamic models of growth and arrivals. 3 lectures. Formerly ECON 409.

ECON 4012A Probability Models for Economic Decisions Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4012.

Selection and completion of a project under faculty supervision that complements coursework on probability models for economic decisions. Course offered online only. 1 activity.

ECON 4013 Experimental and Behavioral Economics (3 units)

Term Typically Offered: SP

Prerequisite: ECON 311 or ECON 3030; and ECON 395 or ECON 3015.

Design and implementation of economic experiments. Computer programming of experiments and statistical analysis of experimental results. Behavioral economic models as an alternative to neoclassical economics include prospect theory, time-inconsistent preferences, and social preferences. 3 lectures. Formerly ECON 445.

ECON 4013A Experimental and Behavioral Economics Project (1 unit)

Term Typically Offered: SP Coreguisite: ECON 4013.

Completion of an original design, implementation and analysis of a lab experiment testing economic theory under faculty supervision. Course offered online only. 1 activity.

ECON 4021 Advanced Econometrics (3 units)

Term Typically Offered: F, SP

Prerequisite: ECON 339 or ECON 3021.

Advanced econometric techniques used to analyze relationships between variables, test economic theories, or uncover causal effects. Concepts in causal inference such as randomization, covariate-adjustment methods, and instrumental variables. Binary-choice and nonlinear models. 3 lectures. Formerly ECON 440.



ECON 4021A Advanced Econometrics Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4021.

Application of advanced econometric techniques to real-world data to address economic problems by analyzing relationships between variables, testing economic theories, or uncovering causal effects. Course offered online only. 1 activity.

ECON 4024 Applied Forecasting (3 units)

Term Typically Offered: TBD

Prerequisite: ECON 339 or ECON 3021.

Use of economic, financial, and other time series data to build and evaluate forecasting models. Forecasting methods including regression-based models, exponential smoothing, AutoRegressive Integrated Moving Average (ARIMA) and the Generalized AutoRegressive Conditional Heteroskedasticity (GARCH) family of models. 3 lectures. Formerly ECON 406.

ECON 4024A Applied Forecasting Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4024.

Selection and completion of a time series and forecasting project under faculty supervision. Course offered online only. 1 activity.

ECON 4025 Causal Machine Learning for Economics (3 units)

Term Typically Offered: SP

Prerequisite: One of the following: ECON 395, CSC 101, CSC 231, CSC 232, ECON 3015, CSC 1001, CSC 1031, or CSC 1032; and one of the following: ECON 339, STAT 324, STAT 334, ECON 3021, STAT 3430, or STAT 3530.

Prediction methods for causal inference. Directed acyclic graphs, double lasso, and double machine learning. Economic applications. 3 lectures.

ECON 4025A Causal Machine Learning for Economics Project (1 unit)

Term Typically Offered: SP Corequisite: ECON 4025.

Machine learning and causal inference replication exercises. Complements the coursework on causal machine learning for economics. Course offered online only. 1 activity.

ECON 4031 Industrial Organization (3 units)

Term Typically Offered: SP

Prerequisite: ECON 311 or ECON 3030.

Application of basic tools of economics to American industry. Case studies of individual firms and industries. Performance of various business structures, such as monopoly and oligopoly. Effects of government regulation and antitrust policy. 3 lectures. Formerly ECON 403.

ECON 4031A Industrial Organization Project (1 unit)

Term Typically Offered: F Corequisite: ECON 4031.

Application of economic modeling to analyze a selected concept from the field of Industrial Organization. Course offered online only. 1 activity.

ECON 4042 Monetary Economics (3 units)

Term Typically Offered: TBD

Prerequisite: ECON 313 or ECON 3040.

The role of money in our economy. The links between monetary policy, interest rates, prices, housing markets, mortgage lending and overall economic activity. Public policy issues relating to real estate markets. 3 lectures. Formerly ECON 424.



ECON 4042A Monetary Economics Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4042.

Application of economic theory and econometrics to the analysis of recent events related to the field of monetary economics. Course offered online only. 1 activity.

ECON 4043 International Monetary Economics (3 units)

Term Typically Offered: SP

Prerequisite: ECON 313 or ECON 3040.

Nature of international payments, U.S. balance of payments. Theory and practice of foreign exchange rate determination under the gold standard, paper standard, and International Monetary Fund (IMF) system. International money and capital markets. Problems of international liquidity and monetary stability. 3 lectures. Formerly ECON 405.

ECON 4043A International Monetary Economics Project (1 unit)

Term Typically Offered: SP Corequisite: ECON 4043.

Economics research in the field of international monetary economics. Course offered online only. 1 activity.

ECON 4052 Public Finance and Public Policy (3 units)

Term Typically Offered: TBD

Prerequisite: ECON 312 or ECON 3050.

Principles of rational decision making with respect to government revenues and spending. Externalities and public goods. Measurement of costs and benefits, and criterion selection. Social insurance. Taxation. 3 lectures. Formerly ECON 410.

ECON 4052A Public Finance and Public Policy Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4052.

Use statistical software to analyze topics from public finance. Evaluation of government policy using the criteria of economic efficiency and equity. Cost benefit analysis. Course offered online only. 1 activity.

ECON 4053 Labor Economics (3 units)

Term Typically Offered: F

Prerequisite: ECON 312 or ECON 3050.

Wage determination theory. Basic economic factors that affect the labor movement. Economic impact of union activities on employment, output, income, wages, prices, and national economic policy. 3 lectures. Formerly ECON 413.

ECON 4053A Labor Economics Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4053.

Use of software to work with government labor data. Summarize labor outcomes and analyze determinants of wages. Course offered online only. 1 activity.

ECON 4054 Economics of Education (3 units)

Term Typically Offered: F

Prerequisite: ECON 312 or ECON 3050.

Application of microeconomic theory, public economics, labor economics, industrial organization to the economics of education. Relationship between primary, secondary, and higher education and labor markets, education policy, and the impact of educational investments on individual and societal outcomes. 3 lectures.



ECON 4055 Urban Economics (3 units)

Term Typically Offered: SP

Prerequisite: ECON 311, ECON 3030, or ECON 3039. Recommended: ECON 312 or ECON 3050.

Application of basic tools of economic analysis to problems of urban regions. Economics of urban land use, zoning, housing, transportation, local public goods, and crime. 3 lectures. Formerly ECON 434.

ECON 4055A Urban Economics Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4055.

Use of statistical software and economic modeling to analyze topics from urban economics. Spreadsheet analysis of residential mortgages. The hedonic method of real estate valuation. Economic policy analysis. Course offered online only. 1 activity.

ECON 4061 International Trade Theory (3 units)

Term Typically Offered: TBD

Prerequisite: ECON 312 or ECON 3050.

Theory of comparative advantage, neoclassical model of trade, offer curves and terms of trade, edgeworth boxes, valuation of factor inputs, effects of migration and mobility of funds, emerging growth and trade distortions, welfare effects of trade, and recent developments in trade theory. 3 lectures. Formerly ECON 404.

ECON 4061A International Trade Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4061.

Review and critique of academic literature and/or news media in regard to a selected concept from the field of international trade. Course offered online only. 1 activity.

ECON 4062 Development Economics (3 units)

Term Typically Offered: SP

Prerequisite: ECON 312 or ECON 3030; and ECON 440 or ECON 4021.

Economic market failures and poverty traps. Public policies for market failures. Causal econometric techniques, and replication exercises on microfinance and microinsurance. Education, health, and agriculture policies, intrahousehold allocations and gender, and corruption and governance. 3 lectures.

ECON 4071 Environmental Economics (3 units)

Term Typically Offered: F

Prerequisite: ECON 312 or ECON 3050.

Economic dimensions of environmental abuse and protection. Use of simple economic models in developing and evaluating environmental policies. Overview of current environmental problems. Issues related to the sustainability of economic growth at the national and international levels. 3 lectures. Formerly ECON 431.

ECON 4071A Environmental Economics Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4071.

Application of economic modeling to analyze a selected concept from the field of environmental economics. Course offered online only. 1 activity.



ECON 4072 Economics of Energy and Resources (3 units)

Term Typically Offered: SP

Prerequisite: ECON 312 or ECON 3050.

Economic theory and public policies for natural resources and energy. Dynamic resource and energy models for public and private sector growth. Principles of capital theory emphasized. Computer software applications of natural resource and energy use under uncertainty. 3 lectures. Formerly ECON 432.

ECON 4072A Economics of Energy and Resources Project (1 unit)

Term Typically Offered: TBD Corequisite: ECON 4072.

Application of economic modeling to analyze a concept in natural resource economics. Course offered online only. 1 activity.

ECON 4073 Economics of Land and Water (3 units)

Term Typically Offered: TBD

Prerequisite: ECON 312 or ECON 3050.

Economic analysis of natural resource issues, policies and management with an emphasis on land and water use decisions in the western United States. Urban demand for water, water supply, economic growth, economic impacts of surface water law and institutions, and land management. 3 lectures. Formerly ECON 435.

ECON 4073A Economics of Land and Water Project (1 unit)

Term Typically Offered: SP Corequisite: ECON 4073.

Use of computer software to analyze problems in water and land management. Optimal water allocation, optimal forest management, water pricing. Course offered online only. 1 activity.

ECON 4082 Development of Economic Thought (3 units)

Term Typically Offered: TBD

Prerequisite: ECON 311, ECON 3030, or ECON 3039.

Analysis of ideas related to the development of economic theory in the Western civilization from the Greeks through the classical, neoclassical, and Keynesian to the current post-Keynesian concepts. 3 lectures. Formerly ECON 417.

ECON 4460 Applied Senior Project (4 units)

Term Typically Offered: F, SP

Prerequisite: Senior standing; ECON 311 or ECON 3030; ECON 313 or ECON 3040; ECON 339 or ECON 3021; and two 4000-level ECON courses.

Analysis of selected economic topics and problems in directed individual or group-based projects, which require application of economic models, principles and theory to investigate important business, economic or social issues. Formal report required. Course may be offered in classroom-based or online format. 4 seminars. Formerly ECON 464.

ECON 4470 Special Advanced Topics (1-3 units)

Term Typically Offered: TBD Prerequisite: Consent of instructor.

Directed group study of special topics for advanced students. The Class Schedule will list topic selected. Repeatable up to 6 units. 1 to 3 lectures. Formerly ECON 470.

ECON 5010 Essential Mathematics for Economic Analysis (3 units)

Term Typically Offered: SU

Prerequisite: Graduate standing. Recommended: ECON 408 or ECON 4010.

Review and discussion of the math tools needed for graduate work in economics, including set theory, calculus, linear algebra, properties of functions, and optimization. 3 lectures. Formerly GSE 510.



ECON 5012 Evidence-Based Decision Analysis (3 units)

Term Typically Offered: SP

Prerequisite: Graduate standing and one of the following: ECON 5021, GSE 520, GSB 518, or GSB 5518. Recommended: GSE 524 or ECON 5015.

Representing uncertainty using discrete and continuous conditional probabilities. Monte Carlo simulation of independent and correlated random variables. Optimization under certainty and uncertainty. Case studies. 3 lectures. Formerly GSE 544.

ECON 5015 Computing and Machine Learning for Economics (3 units)

Term Typically Offered: F Prerequisite: Graduate standing.

Use of computer programming for advanced data analysis in economics and analytics. Computer programming using statistical software, data gathering and cleaning, and machine learning. 3 lectures. Formerly GSE 524.

ECON 5016 Collaborative Software Development Environment for Economists (1 unit)

Term Typically Offered: F

Corequisite: GSE 524 or ECON 5015.

Best practices for scientific computing in economics research regarding effectiveness, efficiency, maintainability, reproducibility, clarity, scalability and portability. The Unix shell. Version control. Git and GitHub. Automation and Make. Job schedulers. Agile methodologies for project management. Elements of programming style. 1 lecture.

ECON 5020 Essential Statistics for Econometrics (3 units)

Term Typically Offered: SU

Prerequisite: Graduate standing. Recommended: GSE 510 or ECON 5010.

Statistical concepts for graduate work in econometrics, including probability theory, random variables, distribution functions, independence, expectations, covariance, correlation, random samples, estimation methods, properties of estimators, asymptotic theory, hypothesis testing, confidence intervals. 3 lectures. Formerly GSE 518.

ECON 5021 Advanced Econometrics I (3 units)

Term Typically Offered: F

Prerequisite: Graduate standing; and GSE 518 or ECON 5020.

Linear regression model. Confidence and prediction intervals. Hypothesis testing. Generalized regression model and heteroscedasticity. Maximum likelihood estimator and its properties. Simulation and resampling methods. 3 lectures. Formerly GSE 520.

ECON 5022 Advanced Econometrics II (3 units)

Term Typically Offered: SP

Prerequisite: Graduate standing; and GSE 520 or ECON 5021.

Maximum likelihood estimation. Binary, multinomial, and ordered discrete response models. Simulation methods, bootstrap standard errors. Truncated, censored regression. Structural equation modeling. Random utility and mixed logit models. Demand estimation. Generalized Method of Moments (GMM) estimation. Single agent dynamic models. 3 lectures. Formerly GSE 522.

ECON 5023 Microeconometrics (3 units)

Term Typically Offered: SP

Prerequisite: GSE 520 or ECON 5021.

Limited dependent variables and selection models. Quantile regression and nonparametric methods. Causal inference: Potential outcomes framework, causal treatment effects, randomization, matching, propensity-score methods, instrumental variables, regression discontinuity, difference-in-difference, two-way fixed effects, synthetic control, and econometrics of randomized experiments. 3 lectures. Formerly GSE 526.



ECON 5024 Modeling Financial Time Series (3 units)

Term Typically Offered: SP

Prerequisite: one of the following: GSB 518, GSB 5518, GSE 518, or ECON 5020; and GSE 520 or ECON 5021.

Time-series analysis to model the risk and return of financial assets. Linear Time-Series models, Autoregressive Integrated Moving Average (ARIMA), Stationary and Non-stationary Series, Cointegration, Vector Auto-regression (VAR), Vector Error Correction (VECM), Generalized Autoregressive Conditional Heteroskedasticity family (GARCH), Value-at-Risk (VaR), and Extreme Value Theorem. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Crosslisted as ECON 5024/GSB 5548.

ECON 5025 Machine Learning for Prediction and Causal Inference (3 units)

Term Typically Offered: SP

Corequisite: GSE 526 or ECON 5023.

Regularization, model selection, and supervised learning. Post model selection inference for causal effects. Double/debiased machine learning, causal trees, causal forests, and synthetic controls. 3 lectures. Formerly GSE 552.

ECON 5029 Econometrics and Data Analysis (3 units)

Term Typically Offered: F

Prerequisite: One of the following: GSB 518, GSE 518, GSB 5518, or ECON 5020.

Estimation and analysis of econometric models for analyzing business data. Linear regression models, robust standard errors, causal inference, instrumental variables, maximum likelihood estimation, and logistic regression models and extensions. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSE 519.

ECON 5030 Microeconomic Analysis (3 units)

Term Typically Offered: F

Prerequisite: GSE 510 or ECON 5010.

Preferences and choice, preferences over commodities, consumer demand theory, producer theory, choice under uncertainty, simultaneous and sequential move games, incomplete information games, mechanism and incentive design. 3 lectures. Formerly GSE 511.

ECON 5031 Industrial Economics (3 units)

Term Typically Offered: SP

Prerequisite: GSE 511 or ECON 5030.

Economic theories of industrial organization with specific reference to cartels, market concentration and performance, vertical integration, franchise contracts, ownership and control of firms, multipart and discriminatory pricing, and tie-in sales. Antitrust law and government regulation of industry. 3 lectures. Formerly GSE 538.

ECON 5032 Incentives and Market Design (3 units)

Term Typically Offered: SP

Prerequisite: GSE 511 or ECON 5030.

Ascending, first-price, second-price, and double auctions. Revenue equivalence, multi-unit auctions, the Vickrey-Clarke-Groves mechanism, and matching markets. The deferred acceptance algorithm, the immediate acceptance algorithm, and the many-to-one matching model. 3 lectures. Formerly GSE 546.

ECON 5040 Dynamic Stochastic Modeling (3 units)

Term Typically Offered: SP

Prerequisite: GSE 524 or ECON 5015; and GSE 511 or ECON 5030.

Finite Markov chains, linear state space models, dynamic programming, autoregressive-1 (AR1) processes, optimal growth models, optimal job search models, Arrow securities, consumption-based asset pricing. 3 lectures. Formerly GSE 512.



ECON 5052 Public Economics (3 units)

Term Typically Offered: TBD

Prerequisite: GSE 511 or ECON 5030.

Economic analysis of the rationale for public expenditure and taxation. Externalities, pollution and public policy, income redistribution and public welfare, public goods, collective choice and political institutions, cost-benefit analysis, taxation and tax policy, and state-local finance. 3 lectures. Formerly GSE 536.

ECON 5053 Advanced Labor Economics (3 units)

Term Typically Offered: SP

Prerequisite: GSE 520 or ECON 5021; and GSE 526 or ECON 5023.

Research methods in labor economics and application of modern empirical techniques to the analysis of labor markets. Labor supply and demand, discrimination, migration, and human capital accumulation. 3 lectures. Formerly GSE 542.

ECON 5061 International Economics (3 units)

Term Typically Offered: TBD

Prerequisite: GSE 511 or ECON 5030.

Analysis of the international movement of goods, services, capital and payments. The role of exchange rates, tariffs, quotas, and transport costs. Relationship between international trade and economic growth. 3 lectures. Formerly GSE 534.

ECON 5071 Environmental and Natural Resource Economics (3 units)

Term Typically Offered: TBD

Prerequisite: GSE 511 or ECON 5030.

Economic analysis of pollution, congestion, public good provision, and natural resource conservation. Static and dynamic efficiency, economic growth and sustainability, pollution taxes, marketable permits, and the design of market-based regulations. 3 lectures. Formerly GSE 532.

ECON 5500 Independent Study (1-3 units)

Term Typically Offered: TBD

Prerequisite: Graduate standing and consent of department head.

Advanced study planned and completed under the direction of a departmental faculty member. Repeatable up to 6 units. Formerly GSE 500.

ECON 5560 Applied Economics Project (1-4 units)

Term Typically Offered: TBD

Prerequisite: Graduate standing in MS Quantitative Economics program. Recommended: ECON 5016.

Applied, real-world empirical projects in economics chosen according to the common interests and needs of the students enrolled. Repeatable up to 4 units. 1 to 4 seminars. Formerly GSE 580.

ECON 5570 Special Advanced Topics (1-3 units)

Term Typically Offered: TBD

Prerequisite: Graduate standing and consent of instructor.

Directed group study of special topics for graduate students. The Class Schedule will list topic selected. Repeatable up to 6 units. 1 to 3 lectures. Formerly GSE 570.

ECON 5597 Comprehensive Examination (0 units)

Term Typically Offered: SP

CR/NC

Prerequisite: Graduate standing and consent of department chair.

Culminating written exam for masters in quantitative economics demonstrating independent thinking using material from economic theory, econometrics, and computer programming. Scheduled in the final semester of the graduate program. Credit/No Credit grading only.



GSA Courses

GSA 5536 Federal Estate and Gift Taxation (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Federal taxation of gift, estate and generation-skipping transfers during one's life and at death, including high-net-worth transfer tax strategies. 3 lectures. Formerly GSA 536.

GSA 5537 State and Local Taxation (3 units)

Term Typically Offered: F

Prerequisite: OCOB graduate standing.

Multi-state income and franchise taxation. Property taxes, sales, and use taxes. Constitutional authority for and limitations upon imposition of state taxes. Determining states tax residency and its importance. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSA 537.

GSA 5538 Current Developments in Taxation (3 units)

Term Typically Offered: F

Prerequisite: OCOB graduate standing.

Current developments in income taxation of individuals, trusts and estates and business entities. Transfer taxation of gifts and estates. Ethics and professional responsibility in taxation. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSA 538.

GSA 5540 Taxation of Corporations and Partnerships (3 units)

Term Typically Offered: TBD

Prerequisite: OCOB graduate standing.

Federal income taxation of C corporations and partnerships and their respective shareholders or partners. Entity formation, operations, distributions and liquidation. 3 lectures. Formerly GSA 540.

GSA 5546 Tax Research and Administrative Procedures (3 units)

Term Typically Offered: F

Prerequisite: OCOB graduate standing.

Research techniques applicable to tax issues including the communication of research results. Administrative procedures necessary for tax compliance with the various tax jurisdictions with primary emphasis on IRS practices. 3 lectures. Formerly GSA 546.

GSA 5548 Advanced Individual Taxation and Tax Planning (3 units)

Term Typically Offered: F

Prerequisite: OCOB graduate standing.

Advanced concepts concerning impact of income and transfer taxes on individuals. Important judicial concepts applicable throughout various federal tax disciplines. Financial, estate, property and compensation tax planning issues. 3 lectures. Formerly GSA 548.

GSA 5549 Advanced Partnership Taxation (3 units)

Term Typically Offered: SP

Prerequisite: GSA 540 or GSA 5540.

Federal income tax treatment of partnerships, limited liability companies and S corporations and their owners with a primary emphasis on partnerships. Creation, operation, liquidation and sale of such organizations. 3 lectures. Formerly GSA 549.

GSA 5550 Advanced Corporate Taxation (3 units)

Term Typically Offered: SP

Prerequisite: GSA 540 or GSA 5540.

Income tax treatment of corporations and their shareholders. Mergers and acquisitions, including taxable acquisitions, tax-free mergers, taxation of boot, and tax attributes. 3 lectures. Formerly GSA 550.



GSA 5551 International Taxation (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Fundamental tax concepts of outbound transactions by U.S. taxpayers and inbound transactions by foreign taxpayers. Controlled foreign corporations, Subpart F, Global Intangible Low-tax Income (GILTI), foreign tax credit, transfer pricing, and tax treaties. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSA 551.

GSA 5560 Tax Technology and Analytics (3 units)

Term Typically Offered: F

Prerequisite: OCOB graduate standing.

Business intelligence, randomized testing, predictive analytics, prescriptive analytics, statistical modeling, decision-making automation, adaptive learning, data mining, AI, data visualization and machine learning as applied to tax planning. Course may be offered in classroom-based, online, or hybrid format. 3 lectures.

GSA 5561 Taxation of High Technology (3 units)

Term Typically Offered: F

Prerequisite: OCOB graduate standing.

Taxation of high technology enterprises and transactions involving technology products and intellectual property, including digital assets and software products and services. Research and development (R&D) tax credits. Taxation of stock-based compensation. 3 lectures.

GSA 5562 Accounting for Income Taxes (3 units)

Term Typically Offered: TBD

Prerequisite: OCOB graduate standing.

Financial accounting rules for calculation and presentation of corporate provision for income taxes. Basic concepts and procedures of Accounting Standards Codification Topic 740. Financial statement disclosure requirements. Audit risks, implementation issues, planning alternatives. Course may be offered in classroom-based, online, or hybrid format. 3 lectures.

GSA 5570 Special Advanced Topics (1-3 units)

Term Typically Offered: TBD

Prerequisite: OCOB graduate standing and consent of instructor.

Directed study of special topics for graduate students. The Class Schedule will list topic selected. Repeatable up to 6 units. 1 to 3 lectures. Formerly GSA 570.

GSA 5597 Comprehensive Examination (0 units)

Term Typically Offered: SP

CR/NC

Prerequisite: OCOB graduate standing and consent of graduate coordinator.

Culminating written examination for MS Taxation students showing integration of knowledge, critical and independent thinking, and mastery of the subject matter. Scheduled by the faculty advisor in the final semester of the graduate program. Credit/No Credit grading only.

GSB Courses

GSB 5500 Independent Study (1-3 units)

Term Typically Offered: F, SP, SU Prerequisite: OCOB graduate standing.

Advanced study planned and completed under the direction of the Program Director or another faculty member. Open only to graduate students who have demonstrated ability to do independent work. A formal written proposal must be accepted by the Associate Dean of OCOB Graduate Programs before work begins. Repeatable up to 3 units. Formerly GSB 500.



GSB 5501 Individual Research (1-3 units)

Term Typically Offered: F, SP, SU

Prerequisite: OCOB graduate standing and approval of the Associate Dean.

Advanced individual research planned and completed under the direction of a member of the college faculty. A formal written proposal must be accepted by the Associate Dean of OCOB Graduate Programs before work begins. Formerly GSB 501.

GSB 5505 Financial Accounting (3 units)

Term Typically Offered: SU

Prerequisite: OCOB graduate standing.

Introduction to financial accounting with little accounting background. Recording economic events like corporate investments, financing transactions and operating activities on primary financial statements. Development of accounting vocabulary and skills needed to analyze and interpret financial statements. Course may be offered in classroom-based, online, or hybrid format. 3 lectures.

GSB 5510 Data Visualization and Communication in Business (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Principles of data visualization and storytelling. Data visualization tools for different types of data in the context of business analytics. Communication of results for business actionable insights. Software use includes Excel, Tableau and R. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 510.

GSB 5511 Accounting for Managers (3 units)

Term Typically Offered: SP

Prerequisite: GSB 505 or GSB 5505; and OCOB graduate standing.

Emphasis on interpretation and use as opposed to the construction of accounting information. Development of essential ability to use accounting information as a platform for decision making. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 511.

GSB 5512 Introduction to Business Analytics (3 units)

Term Typically Offered: F

Prerequisite: OCOB graduate standing.

Focus on a variety of analytics concepts and tools to prepare data, apply appropriate statistical methods, and communicate findings and their business relevance. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 512.

GSB 5513 Organizational Behavior (3 units)

Term Typically Offered: F

Prerequisite: OCOB graduate standing.

Application of behavioral, social, and organizational science concepts to management. Decision making, motivation, communications, leadership, diversity, cultural and ethical behavior, group dynamics, organization change, and development. 3 lectures. Formerly GSB 513.

GSB 5514 Legal and Regulatory Environment of Business (3 units)

Term Typically Offered: TBD

Prerequisite: OCOB graduate standing.

Legal and regulatory environment in which business operates. Statutory, regulatory, societal, and global influences impacting business operations. Reduce business risk and improve compliance. Analytic tools and experiential application. Interaction between law, ethics and management decisions. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 514.



GSB 5516 Strategic Marketing Analytics (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Analysis of customer information, using a broad range of tools and techniques including predictive, statistical, and optimization models. Integration of data into reporting platforms. Application of findings to marketing decision-making. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 516.

GSB 5517 Strategic People Analytics (3 units)

Term Typically Offered: SP

Prerequisite: GSE 519 or ECON 5029; and OCOB graduate standing.

Application of business analytics approaches and techniques to understanding and managing human resources. Emphasizes problems addressed using people analytics, including which methods are best and under what conditions, data quality and validity issues, and interpretation in the HR context. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 517.

GSB 5518 Essential Statistics for Business Analytics (3 units)

Term Typically Offered: SU

Prerequisite: OCOB graduate standing.

Statistics background needed for analysis of business data and econometrics. Probability theory, random variables, sampling and sampling distributions, bootstrapping, estimation methods, properties of estimators, hypothesis testing, and confidence intervals. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 518.

GSB 5520 Data Management for Business Analytics (3 units)

Term Typically Offered: F

Prerequisite: OCOB graduate standing.

Exploration of data management including relational databases, data warehouses, and NOSQL databases. Foundation for analyzing, designing, implementing and using information repositories in a business environment. Database development life cycle, data modeling, SQL programming, data quality and integration. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 520.

GSB 5521 Cloud Services and Applications for Business Analytics (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing. Recommended: GSB 520 or GSB 5520.

Apply cloud resources for business analytics. Identify business benefits of cloud computing, storage, networking, data management and security. Use web services to analyze big data including query, statistical analysis, machine learning and visualization. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 521.

GSB 5522 Advanced Management Information Systems (3 units)

Term Typically Offered: TBD

Prerequisite: OCOB graduate standing.

Analysis of the successes and challenges managers face when planning for and implementing information systems. Design and development of information systems including databases. 3 lectures. Formerly GSB 522.

GSB 5523 Managerial Economics (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Microeconomics of firm management and firm profitability. Demand, supply, efficiency, competitive markets, monopoly, oligopoly, game theory, pricing strategy, and principal-agent problems. Development of an analytical framework for analyzing how these topics are important for managers. 3 lectures. Formerly GSB 523.



GSB 5524 Marketing Management (3 units)

Term Typically Offered: F

Prerequisite: OCOB graduate standing.

Introduction to marketing management. Concepts and principles necessary to plan, direct and control the product, promotion, distribution and pricing strategies of the firm. 3 lectures. Formerly GSB 524.

GSB 5525 Project Management (3 units)

Term Typically Offered: SU

Prerequisite: OCOB graduate standing.

Project management tools and processes to establish priorities, scope, and constraints; money and time. Planning, organizational, and resource challenges common to a variety of project types in service and production environments. Course may be offered in classroom-based or hybrid format. 3 lectures. Formerly GSB 525.

GSB 5529 Management Communication (3 units)

Term Typically Offered: SU

Prerequisite: OCOB graduate standing.

Development and demonstration of business writing and oral presentation skills. Prepare written business documents and reports, and professional oral presentations, and persuasive slide decks. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 529.

GSB 5530 Data Analytics and Mining for Business (3 units)

Term Typically Offered: TBD

Prerequisite: OCOB graduate standing. Recommended: one of the following: GSB 512, GSB 5512, GSB 518 or GSB 5518.

Exploration of the concepts, tools and techniques of data mining in the business context, using case study and problem-solving approaches. Multidimensional data modeling, predictive analytics, pattern discovery, forecasting, text mining, and data visualization. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 530.

GSB 5531 Managerial Finance (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Theories and applications of corporate finance. Time value of money. Valuation of investment projects and financial assets. Financial markets and institutions. Capital budgeting and cost of capital estimation. 3 lectures. Formerly GSB 531.

GSB 5533 Aggregate Economics Analysis and Policy (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Theoretical and empirical framework of the macroeconomy in which businesses must operate. GDP, inflation, unemployment, interest rates and monetary and fiscal policies. Dynamics of the macroeconomic environment over time. 3 lectures. Formerly GSB 533.

GSB 5534 Supply Chain and Operations Management (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Introduction to the supply chain and its interaction with other areas in an organization. Emphasis on applying operational excellence paradigms and approaches to achieve competitive advantage in cost, quality, time, and flexibility in manufacturing and service operations. 3 lectures. Formerly GSB 534.



GSB 5536 Data Ethics for Business Analytics (3 units)

Term Typically Offered: SP

Prerequisite: GSB 520 or GSB 5520; and OCOB graduate standing.

Examination of ethical risks raised by data analysis, including data collection, ownership and usage. Philosophical examination of topics raised by data analysis, including consent, privacy, transparency, bias and potential harms from data collection and use. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 536.

GSB 5539 Graduate Internship in Business (3 units)

Term Typically Offered: SP

CR/NC

Prerequisite: OCOB graduate standing.

Practical experience involving the application and further development of skills. Placement requires supervisory support in a business, nonprofit, or governmental organization. A formal written proposal must be accepted by the Associate Dean of OCOB Graduate Programs before work begins. Credit/No Credit grading only. Repeatable up to 6 units. Formerly GSB 539.

GSB 5544 Computing and Machine Learning for Business Analytics (3 units)

Term Typically Offered: F

Prerequisite: OCOB graduate standing.

Use of computers for advanced data analysis in business analytics. Computer programming using statistical software, data gathering and cleaning, and machine learning. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 544.

GSB 5545 Advanced Machine Learning for Business Analytics (3 units)

Term Typically Offered: SP

Prerequisite: GSB 544 or GSB 5544; and OCOB graduate standing.

Use of computers for advanced machine learning in business analytics. Boosting, ensemble learning, Bayesian methods, and various types of neural networks. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 545.

GSB 5547 Financial Analytics (3 units)

Term Typically Offered: TBD

Prerequisite: one of the following: GSB 518, GSB 5518, GSE 518, or ECON 5020; and GSB 544 or GSB 5544.

Data analytics tools and models in finance including encryption theory, blockchains, and machine learning. Deep dive into Machine Learning (ML) algorithms for financial data anomaly detection, predictive modeling, and backtesting. Develop hash functions for encryption. Apply techniques to real-world finance problems and data. Course may be offered in classroom-based, online, or hybrid format. 3 lectures.

GSB 5548 Modeling Financial Time Series (3 units)

Term Typically Offered: SP

Prerequisite: one of the following: GSB 518, GSB 5518, GSE 518, or ECON 5020; and GSE 520 or ECON 5021.

Time-series analysis to model the risk and return of financial assets. Linear Time-Series models, Autoregressive Integrated Moving Average (ARIMA), Stationary and Non-stationary Series, Cointegration, Vector Auto-regression (VAR), Vector Error Correction (VECM), Generalized Autoregressive Conditional Heteroskedasticity family (GARCH), Value-at-Risk (VaR), and Extreme Value Theorem. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Crosslisted as ECON 5024/GSB 5548.

GSB 5551 Prescriptive Analytics (3 units)

Term Typically Offered: SP

Prerequisite: one of the following: GSE 519, ECON 5029, GSE 522, or ECON 5022.

Monte Carlo simulation. Decision making under uncertainty. Linear and non-linear programming. Model risk. Applications to finance, operations, strategic planning, and marketing. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 551.



GSB 5555 Negotiation for Managers (3 units)

Term Typically Offered: SP

Prerequisite: GSB 513 or GSB 5513; and OCOB graduate standing.

Theory and practice of negotiation in a variety of contexts (e.g., business acquisitions, compensation, business disputes, inter- and intraorganizational) and from a managerial perspective. Culture, ethics, dispute resolution, coalitions. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 555.

GSB 5556 Entrepreneurship and New Venture Management (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Entrepreneurship and new venture management techniques. Entrepreneurial mindset, skills, opportunity, and identification. Founding teams, customer and value proposition development, problem validation and solution ideation, feasibility and viability, business model testing and iteration, legal issues, social impact potential, and pitching. 3 seminars. Formerly GSB 556.

GSB 5562 Strategy in the Global Environment (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing; GSB 511 or GSB 5511; GSB 513 or GSB 5513; GSB 523 or GSB 5523; GSB 531 or GSB 5531; one of the following: GSB 512, GSB 5512, IME 503, or IME 5503; one of the following: GSB 524, GSB 5524, or GSB 573; and one of the following: GSB 534, GSB 5534, IME 580, or IME 5580.

Application of interdisciplinary skills to strategic management. Focus on the perspective of general managers, including social and environmental responsibilities and governance. Uses case studies, group problem-solving, experiential activities. Serves as the integrating course of MBA core curriculum. Course may be offered in classroom-based, online, or hybrid format. 3 seminars. Formerly GSB 562.

GSB 5563 International Business Tour (3 units)

Term Typically Offered: TBD

CR/NC

Prerequisite: OCOB graduate standing.

Business tour exposure to different management systems and their operating environments. Pre-trip and on-the-road meetings, readings, case studies and discussions. Tours of firms, NGOs, government offices, and ministries. Interviews and panels with managers and government officials. Conducted in English. Valid passport required. Field trip required. The Class Schedule will list subtitle selected. Repeatable up to 6 units. Credit/No Credit grading only. 1 seminar, 2 activities. Formerly GSB 563.

GSB 5564 Entrepreneurial Finance (3 units)

Term Typically Offered: TBD

Prerequisite: OCOB graduate standing; and GSB 531 or GSB 5531.

Financing new and fast-growing firms. Preparation of pro-forma financial statements for a new venture; venture capital process. Valuation of firms seeking venture capital, and those planning their initial public offering (IPO). Valuing convertible securities and real options. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 564.

GSB 5569 Managing Technology in the International Legal Environment (3 units)

Term Typically Offered: TBD

Prerequisite: OCOB graduate standing.

Practical legal decisions required to conduct business for or with high technology companies. Methods to protect high technology developments in international markets, including copyrights, patents, trade secrets, trademarks and contracts. Course may be offered in classroom-based, online, or hybrid format. 3 seminars. Formerly GSB 569.

GSB 5570 Special Advanced Topics (1-3 units)

Term Typically Offered: TBD

Prerequisite: OCOB graduate standing and consent of instructor.

Directed group study of special topics for advanced students. Repeatable up to 6 units. The Class Schedule will list topic selected. 1 to 3 seminars. Formerly GSB 570.



GSB 5575 Career Development for Business Analytics I (1 unit)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Career development and preparation with specific focus on the impact of organizational structures on the professions of business analytics and data science. Personal marketing in a dynamic technological environment. Course may be offered in classroom-based, online, or hybrid format. 1 lecture. Formerly GSB 575.

GSB 5576 Career Development for Business Analytics II (1 unit)

Term Typically Offered: F

Prerequisite: GSB 575 or GSB 5575.

Career development and preparation focusing on verbal communication skills for business analytics, and refining interview and presentation skills. Course may be offered in classroom-based or hybrid format. 1 lecture.

GSB 5577 Career Development for Business Analytics III (1 unit)

Term Typically Offered: SP Prerequisite: GSB 5576.

Career development and preparation focusing on collaboration skills for business analytics, emphasizing the identification and application of digital tools that enhance team productivity. Course may be offered in a classroom-based, online, or hybrid format. 1 lecture.

GSB 5583 Management of Human Resources (3 units)

Term Typically Offered: TBD

Prerequisite: OCOB graduate standing.

An overview of human resource (HR) management, including strategic HR, job analysis, recruitment, selection, performance appraisal, training, compensation, employee rights, and employee health and safety. Course may be offered in classroom-based, online, or hybrid format. 3 seminars. Formerly GSB 583.

GSB 5590 Energy and Environmental Finance (3 units)

Term Typically Offered: SP

Prerequisite: GSB 511 or GSB 5511; GSB 523 or GSB 5523; GSB 531 or GSB 5531; and OCOB graduate standing.

Theory and practical tools to improve financing and investment decisions as they relate to the energy industry and markets, and achieve environmental objectives. Valuation models, real options, energy derivatives, project finance, impact investing, and managing climate and technological risks. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GSB 590.

GSB 5591 Developing Consumer Insights with Textual Data (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Informing data collection with consumer theory. Utilizing APIs for data collection. Application of the word and text analysis methodology to unstructured textual data. Component-based data mining software Orange3 is covered. 3 lectures.

GSB 5594 Managing Change (3 units)

Term Typically Offered: SP

Prerequisite: OCOB graduate standing.

Essential knowledge, skills, and competencies needed to intervene in an organization to improve its effectiveness. Exploration of alternative planned change strategies. Design and implementation of a variety of change mechanisms to enhance continuous development and change. 3 seminars. Formerly GSB 595.



GSB 5598 Project (1-6 units)

Term Typically Offered: F, SP, SU

Prerequisite: OCOB graduate standing and consent of the department.

Collaborative business project with a client organization supervised by faculty. Apply knowledge, and competencies to address a business problem. A formal written proposal must be accepted by the Associate Dean of OCOB Graduate Programs before work begins. The project may last up to one year. Total credit limited to 6 units. Formerly GSB 503.

IBL Courses

IBL 1100 First Year Seminar (1 unit)

Term Typically Offered: F

Offered at the Solano campus. Introduce cadets to the campus community and to prepare them for academic, personal, and professional success through fostering a sense of belonging. Academic strategies and campus resources, to help navigate campus and department norms and expectations, engage in meaningful dialogue, and provide opportunities for self-reflection. 1 lecture. Formerly IBL 110 at Cal Maritime.

IBL 3300 International Business and Logistics Internship (3 units)

Term Typically Offered: SU

Prerequisite: Consent of instructor.

Offered at the Solano campus. Spend time in a domestic work environment that has been setup by the Maritime Policy and Management Department. Acquire practical learning outcomes in management, resource allocation, and business communications. Focus of this experience is to get employment in a company that will enhance the theoretical knowledge, improve the practical learning and build leadership and management skills. Formerly IBL 300 at Cal Maritime.

ITP Courses

ITP 1100 Student Orientation, College Success, and Career Readiness (1 unit)

Term Typically Offered: F

Prerequisite: Industrial Technology and Packaging major.

Orientation to ITP major and its concentrations. Development of a personalized graduation plan. Skills for academic success: goal setting, time management, study skills, registration strategies, overall adjustment to college life, including connection to a social peer network, and career readiness. This is intended for first-time first year students. Field trip required. 1 activity. Formerly ITP 100.

ITP 1125 Introduction to Industrial Technology and Packaging (1 unit)

Term Typically Offered: F

Prerequisite: Industrial Technology and Packaging major.

Comprehensive overview of concepts and opportunities in Industrial Technology and Packaging. Discusses fundamentals of product development, packaging systems, and supply chain and operations management. Focus on innovation and sustainability. Includes practical application of tools to address real-world challenges. 1 lecture. Formerly ITP 125.

ITP 1150 Power Systems and Renewable Energy (3 units)

Term Typically Offered: SP

Prerequisite: Industrial Technology and Packaging major or Industrial Technology minor.

An overview of industrial power generation/transmission methods and renewable energy sources, including solar, wind, and fuel cell technologies. Laboratory activities include electrical and electronic circuits fundamentals, conventional power, and renewable energy experimentation. 2 lectures, 1 laboratory. Formerly ITP 150.

ITP 2203 Personal Leadership - 7 Habits (3 units)

Term Typically Offered: SP

Learn and practice the what, why, and how of personal leadership. Uses the 7 Habits of Highly Effective People framework to provide students with skills they will use repeatedly in their careers and life. Course offered in hybrid format with classroom-based and online learning. 3 lectures. Formerly ITP 203.



ITP 2208 Shipping and Port Management (3 units)

Term Typically Offered: F, SP

Prerequisite: ECON 201 or ECON 2001.

Examination of operational, economic, managerial, and policy issues in global shipping and port management. Current maritime industry practices emphasized through field trips, quest lectures, contemporary examples, and practical applications. Field trip may be required. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Crosslisted as BUS/ITP 2208.

ITP 2211 Industrial Safety and Maintenance (3 units)

Term Typically Offered: SP

Introduction to occupational health, safety and plant maintenance. Topics include job hazard analysis, hazard control/communication, OSHA standards, product safety, ergonomics, ethics in safety and maintenance of mechanical systems. 2 lectures, 1 activity. Formerly ITP 211.

ITP 2233 Product Modeling and Communication (3 units)

Term Typically Offered: F, SP

Fundamental theory and practice of digital modeling with two-dimensional and three-dimensional modeling software commonly used in industry. Includes part/assembly modeling, geometric dimensioning/tolerancing, and fundamental skills in communicating product design data in accordance with industry standards. 2 lectures, 1 laboratory. Formerly ITP 233.

ITP 2234 Packaging Design Fundamentals (3 units)

Term Typically Offered: F, SP

Overview of structural and graphic concepts for package design. Introduction to packaging development and design thinking. Focus on design for manufacturing, two and three-dimensional form creation, branding, and user experience. Laboratory focuses on computer-aided design, photo-realistic rendering, and rapid prototyping. 2 lectures, 1 laboratory. Formerly ITP 234.

ITP 2241 Industrial and Packaging Materials (3 units)

Term Typically Offered: F

Prerequisite: One of the following: CHEM 124, CHEM 127, or CHEM 1120.

Overview of organic materials and applied materials chemistry utilized across various industrial sectors. Molecules, macromolecules, structureproperty relationship, compatibility, polymer chemistry, elastomers, polymer-composites, paper chemistry, surface and chemical treatments, wettability, coatings, hydrophobicity, hydrophilicity, advances in biomolecules and sustainable materials, end-of-life scenarios. 2 lectures, 1 laboratory.

ITP 2260 Materials and Manufacturing Technology (3 units)

Term Typically Offered: F

Prerequisite: One of the following: CHEM 124, CHEM 127, or CHEM 1120.

Introduction to materials and manufacturing with emphasis on metals. Analysis of relationships among materials, product design, and manufacturing. Provides experiential learning on manufacturing equipment operation. 2 lectures, 1 laboratory. Formerly ITP 260.

ITP 2270 Special Topics (1-4 units)

Term Typically Offered: TBD

Prerequisite: Consent of instructor.

Directed group study of special topics. The Class Schedule will list topic selected. Repeatable up to 8 units. Course may be offered in a classroombased, online, or hybrid format. 1 to 4 lectures. Formerly ITP 270.

ITP 2275 Industrial Facilities Management (3 units)

Term Typically Offered: TBD

Prerequisite: ITP 150 or ITP 1150. Corequisite: ITP 211 or ITP 2211.

Overview of modern industrial facilities, considering digitalization, sustainability and lean practices. Emphasis on support systems such as heating and cooling; material handling and energy management, warehouse management, and communication systems. 2 lectures, 1 activity. Formerly ITP 275.



ITP 3303 Lean Six Sigma Green Belt (3 units)

Term Typically Offered: F, SP, SU

Prerequisite: One of the following: STAT 218, STAT 251, STAT 301, STAT 312, STAT 1110, STAT 1210, STAT 1510, or STAT 3210.

Develop skills to function as a lean six sigma leader. Discussion and problem sessions cover lean six sigma green belt body of knowledge: define, measure, analyze, improve, and control. Team skills necessary to complete projects. Course may be offered in classroom-based or online format. 3 lectures. Formerly ITP 303.

ITP 3304 International Supply Chains (3 units)

Term Typically Offered: F

Prerequisite: Consent of instructor.

Design and development of global supply chain networks. Focus on product value chain, coordination, sourcing, packaging systems, transportation, and sustainability. Analysis of target country history, culture, geography, economy, and infrastructure. Study tour to target country is an essential course activity. Field trip required. The Class Schedule will list country selected. 2 lectures, 1 activity. Crosslisted as BUS/ITP 3304. Formerly BUS 304.

ITP 3308 Logistics and Intermodal Transportation (3 units)

Term Typically Offered: F, SP Prerequisite: ITP 371 or ITP 3371.

Examination of intermodal transportation as a core component of modern logistics systems. Emphasis on integration of truck, rail, maritime, and air modes. Global trade flows, seaport operations, container terminal operations, truck transport, rail, air operations, intermediaries, shippers, and environmental impact. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Crosslisted as BUS/ITP 3308.

ITP 3326 Product Design and Development (3 units)

Term Typically Offered: F, SP

Prerequisite: One of the following: ITP 233, BUS 310, ITP 2233, or BUS 3310.

User-centered product design with an emphasis on innovation, inclusion, and sustainability. Design thinking, identification of user needs, concept generation/selection/testing, industrial design, ergonomics, inclusive design, sustainable product design, product architecture, intellectual property, sketching, and quick prototyping techniques. 2 lectures, 1 laboratory. Formerly ITP 326.

ITP 3330 Packaging Fundamentals (3 units)

Term Typically Offered: F, SP, SU 2026-28 or later. Upper-Div GE Area 2/5 2020-26 catalogs: Upper-Div GE Area B

Prerequisite: Junior standing or Industrial Technology and Packaging major; completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs); completion of GE Area 2 with a grade of C- or better (GE Area B4 for the 2020-26 catalogs); and completion of GE Area 5A (GE Area B1 for the 2020-26 catalogs) Fulfills GE Areas Upper-Division 2 or Upper-Division 5 (GE Area Upper-Division B for students on the 2020-26 catalogs).

Overview of packaging functions, materials, and processes. Discuss value addition to product-package systems via various packaging materials, processes, design, and protective packaging for global distribution. Illustrates the impact of packaging on the environment. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory. Formerly ITP 330.

ITP 3334 Structural Packaging Design (3 units)

Term Typically Offered: F

Prerequisite: ITP 234 or ITP 2234.

Advanced concepts for structural package design with emphasis on inclusive and sustainable design. Two-dimensional and three-dimensional form creation. Focus on design strategies, design for manufacturing, branding, and user experience. Laboratory focuses on computer-aided design, photorealistic rendering, and rapid prototyping. 2 lectures, 1 laboratory.



ITP 3341 Packaging Polymers and Processing (3 units)

Term Typically Offered: F, SP, SU 2026-28 or later. Upper-Div GE Area 2/5 2020-26 catalogs: Upper-Div GE Area B

Sustainability Related

Prerequisite: Junior standing or Industrial Technology and Packaging major; completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs); completion of GE Area 2 with a grade of C- or better (GE Area B4 for the 2020-26 catalogs); and a CHEM course in GE Area 5A (GE Area B1 for the 2020-26 catalogs).

Physical and chemical properties of plastic materials and processing techniques. Evaluation of current materials and technologies to reduce waste and to improve reuse and recycling. Applied laboratory using common industry processes with emphasis on relationships among processing, structure, properties, and consumer response. Course may be offered in classroom-based or hybrid format. 2 lectures, 1 laboratory. Fulfills GE Areas Upper-Division 2 or Upper-Division 5 (GE Area Upper-Division B for students on the 2020-26 catalogs). Formerly ITP 341.

ITP 3371 Supply Chain Management in Manufacturing and Services (3 units)

Term Typically Offered: F, SP, SU

Prerequisite: One of the following: STAT 218, STAT 251, STAT 301, STAT 312, STAT 1110, STAT 1210, STAT 1510, or STAT 3210; and one of the following: MATH 121, MATH 141, MATH 221, MATH 1261, MATH 1264, or MATH 1267 with a grade of C- or better, or consent of instructor.

Introduction to supply chain management and performance metrics. Supply or value chains dealing with hard goods and services from design to daily management. Project management techniques and technology for making and implementing decisions. 3 lectures. Formerly ITP 371.

ITP 3390 Industrial Automation (3 units)

Term Typically Offered: SP Prerequisite: ITP 260 or ITP 2260.

Programming and setup of computer-controlled manufacturing/assembly machinery. Includes an introduction to Smart Manufacturing and the Industrial Internet of Things (IIoT). Computer numerically controlled (CNC) machines, robots, programmable logic controllers, and online data monitoring. 2 lectures, 1 laboratory. Formerly ITP 390.

ITP 4400 Special Problems for Advanced Undergraduates (1-4 units)

Term Typically Offered: F, SP

Prerequisite: Junior standing and consent of instructor.

Individual or group investigation, research, project, studies, or surveys of special problems. Repeatable up to 8 units. Formerly ITP 400.

ITP 4403 Lean and Quality Systems Management (3 units)

Term Typically Offered: F, SP Prerequisite: ITP 303 or ITP 3303.

Process improvement and quality assurance viewed from a systems perspective. Lean thinking and tools as a problem solving approach to achieve continuous improvement through waste elimination and variability reduction. Projects improve processes in manufacturing, supply chain, or service. 3 lectures. Formerly ITP 403.

ITP 4404 Lean Six Sigma Green Belt Certification Project (3 units)

Term Typically Offered: TBD Prerequisite: ITP 303 or ITP 3303.

Tools and concepts required to complete a Lean Six Sigma Green Belt Certification project (LSSGB). Supervised independent completion of an LSSGB project for a client selected by the student. Written and verbal presentation of process and results. Formerly ITP 404.

ITP 4406 Business-to-Business Complex Solutions Selling (3 units)

Term Typically Offered: F. SP

Prerequisite: One of the following: BUS 310, BUS 346, BUS 3310, or BUS 3346.

Complex business-to-business sales: understanding customer needs, customizing solutions, providing extended product-service solutions, and communicating value propositions. Selling through cross-functional project sales teams to customer buying committees. Individual mock sales presentations and team case study presentations. 3 lectures. Formerly ITP 406.



ITP 4408 Fiber-Based Packaging (3 units)

Term Typically Offered: SP

Prerequisite: ITP 330 or ITP 3330; or Graphics Communication major and GRC 337 or GRC 2070; or Consumer Packaging concentration and ITP 234 or ITP 3334.

Design of packaging systems using paper, paperboard, corrugated fiberboard, and other fiber-based materials. Physical and chemical properties, manufacturing, converting operations, commercial applications, and sustainability. Tests and procedures for fiber-based packaging materials and packaging products following ASTM, TAPPI, and ISO standards. 2 lectures, 1 laboratory. Formerly ITP 408.

ITP 4409 Packaging Machinery and Processes (3 units)

Term Typically Offered: F, SP Prerequisite: ITP 330 or ITP 3330.

Integrated study of packaging machinery and processes from a practical and operational viewpoint. Understanding basic processes and interrelationship between packaging machinery and product type, production layout, efficiency, material handling and distribution equipment, quality control, and ancillary systems. 2 lectures, 1 activity. Formerly ITP 409.

ITP 4410 Operations Planning and Control (3 units)

Term Typically Offered: F

Prerequisite: BUS 391 or BUS 391; and one of the following: ITP 303, ITP 371, ITP 3303, or ITP 3371.

Linking supply chain operations to deliver value to the end customer. Contrasting of advanced manufacturing concepts, such as pull systems, sales and operations planning, mixed model manufacturing, level production, and theory of constraints to traditional materials requirements planning systems. 2 lectures, 1 activity. Formerly ITP 410.

ITP 4411 Packaging Sustainability (3 units)

Term Typically Offered: F, SP Prerequisite: ITP 330 or ITP 3330.

Comprehensive overview of cradle-to-cradle sustainability topics that apply to the packaging life cycle. Tools for measuring, reporting, and communicating sustainability initiatives. Exploration of current trends and technologies in packaging sustainability. 2 lectures, 1 laboratory. Formerly ITP 411.

ITP 4412 Instrumental Analysis of Packaging Polymers (3 units)

Term Typically Offered: SP Prerequisite: ITP 341 or ITP 3341.

Overview of various analytical methods and tools used to evaluate polymers and other packaging materials, including thermal characterization, spectroscopy, and chromatography. Qualitative and quantitative analysis of the matter. Identification of polymeric materials and morphology. Mass transfer measurement. 2 lectures, 1 laboratory. Formerly ITP 412.

ITP 4413 Quality Evaluation of Packaged Products (3 units)

Term Typically Offered: TBD

Prerequisite: One of the following: CHEM 124, CHEM 127, or ITP 2241. Corequisite: ITP 341 or ITP 3341.

Overview of the role that packaging quality plays in perishable and consumer-packaged goods. Instrumental analysis and techniques used for testing and evaluating the quality of packaged products, material quality, and product-package interaction. 2 lectures, 1 laboratory. Formerly ITP 413.

ITP 4414 Packaging Laws and Regulations (3 units)

Term Typically Offered: SP Prerequisite: ITP 330 or ITP 3330.

Comprehensive overview of the United States laws and regulations applicable to packaging of different types of consumer products and related government organizations. Legal and regulatory requirements related to packaging solutions. Course offered online only. 3 lectures. Formerly ITP 414.



ITP 4415 Supply Chain and Logistics (3 units)

Term Typically Offered: SP Prerequisite: ITP 371 or ITP 3371.

Key concepts, tools, and approaches for making effective supply chain and logistics decisions that support business goals. Focus on practical management issues and applications. Use of business cases and simulations to illustrate and explore best practices. 3 lectures. Formerly ITP 415.

ITP 4416 Strategic Sourcing and Procurement Management (3 units)

Term Typically Offered: F, SP Prerequisite: ITP 371 or ITP 3371.

Strategic sourcing and procurement within the context of supply chain operations. Purchasing and sourcing strategies, contract management, supplier selection and evaluation, e-procurement, global sourcing, outsourcing, supplier relationships, pricing, negotiation, risk management, and warehouse operations. Field trip may be required. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Crosslisted as BUS/ITP 4416.

ITP 4417 Supply Chain Analytics (3 units)

Term Typically Offered: F, SP

Prerequisite: BUS 391 or BUS 3391; ITP 371 or ITP 3371; and STAT 252 or STAT 1220.

Application of quantitative methods (e.g., regression, linear programming) to optimize decisions in transportation, inventory, and demand. Use of software and business intelligence tools to analyze and interpret supply chain data. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Crosslisted as BUS/ITP 4417.

ITP 4419 Internship/Cooperative Education (1-3 units)

Term Typically Offered: F

Prerequisite: Approval of area chair, junior standing, and a CPSLO cumulative GPA of at least 2.5 without being on academic probation.

Work experience in business, industry, government and other areas of student career interest. Periodic written progress reports, final report, and evaluation by work supervisor required. Repeatable up to 9 units. Formerly ITP 419.

ITP 4428 Commercialization of Innovation (3 units)

Term Typically Offered: F, SP

Prerequisite: One of the following: BUS 310, BUS 3310, BUS 346, BUS 3346, ITP 326, or ITP 3326.

Concepts, frameworks, and experiences necessary to understand the business potential of innovations and determine if sustainable market opportunities can be identified to exploit them. Overview of intellectual property and licensing. Hands-on exercises with companies or inventors to illustrate concepts. 3 lectures. Formerly ITP 428.

ITP 4430 Healthcare Packaging (3 units)

Term Typically Offered: SP Prerequisite: ITP 330 or ITP 3330.

Packaging systems for pharmaceuticals, nutraceuticals, and medical devices. Characteristics and properties of packaging materials, packaging forms, and sterilization technology. Design principles for healthcare products. Laboratory exercises on standard test methods and evaluation methods. International and federal regulations and standards. 2 lectures, 1 laboratory. Formerly ITP 430.

ITP 4464 Senior Project (3 units)

Term Typically Offered: F, SP

Prerequisite: Senior standing and consent of instructor.

Selection and completion of an individual or group project under faculty supervision. Project topics must be related to problems graduates could encounter in their fields of employment. Project results are presented in a formal report. Course may be offered in classroom-based, online, or hybrid format. 3 seminars. Formerly ITP 464.



ITP 4468 Blockchain in Finance (3 units)

Term Typically Offered: TBD

Prerequisite: BUS 441 or BUS 3441. Recommended: One of the following: CSC 101, CSC 232, CSC 1001, CSC 1032, ECON 395, or ECON 3015.

Blockchain technology in finance with application examples, including stock trading, real estate transactions, and peer-to-peer (P2P) payment systems. Smart contract basics and solidity programming. 3 lectures. Formerly BUS/ITP 468.

ITP 4470 Special Advanced Topics (1-4 units)

Term Typically Offered: TBD

Prerequisite: Junior standing and consent of instructor.

Directed group study of advanced special topics. The Class Schedule will list topic selected. Repeatable up to 8 units. Course may be offered in classroom-based, online, or hybrid format. 1 to 4 lectures. Formerly ITP 470.

ITP 4471 Special Advanced Laboratory (1-4 units)

Term Typically Offered: TBD Prerequisite: Consent of instructor.

Directed group laboratory study of special topics for advanced students. The Class Schedule will list topic selected. Repeatable up to 8 units. Course may be offered in classroom-based, online, or hybrid format. 1 to 4 laboratories. Formerly ITP 471.

ITP 4475 Distribution Packaging Dynamics (3 units)

Term Typically Offered: SP Prerequisite: ITP 330 or ITP 3330.

Survey of tests and procedures for packaging materials and packaging products following ASTM and ISTA standards. Tests for shock, vibration, drop, and impact as prescribed for shipment by truck, rail, sea, and air. Hands-on product packaging testing for quality control. 2 lectures, 1 laboratory. Formerly ITP 475.

ITP 4496 Product Development and Manufacturing I (3 units)

Term Typically Offered: SP

Prerequisite: ITP 233 or ITP 2233; ITP 260 or ITP 2260; ITP 326 or ITP 3326; and BUS 346 or BUS 3346.

Integrative product development experience emphasizing morphological, technological, and functional innovation. Business strategy, inclusive design, sustainable product design, prototyping, cost control, design for manufacturing, and technical documentation. Team project reflects the real-world, dynamic environment of product development and production. 1 lecture, 2 laboratories. Formerly ITP 467.

ITP 4497 Product Development and Manufacturing II (3 units)

Term Typically Offered: SP Prerequisite: ITP 467 or ITP 4496.

Integrative manufacturing business and production systems experience, including design, prototyping, processing, quality control, resource management, cost control, marketing, sales, packaging, and technical documentation. Team project reflects the real-world, dynamic environment of product development and production. 1 lecture, 2 laboratories.

ITP 4498 Packaging Development (3 units)

Term Typically Offered: SP

Prerequisite: ITP 341 or ITP 3341; ITP 408 or ITP 4408; and ITP 475 or ITP 4475.

Holistic approach to developing new packaging systems by balancing the needs of value chain stakeholders. Business strategy, design thinking, disruptive innovation, cross-disciplinary collaboration, user experience, inclusive and sustainable design, design for manufacturing, distribution, disposal, and emerging trends. 2 lectures, 1 laboratory. Formerly ITP 485.



MGT Courses

MGT 1195 Special Topics (1-3 units)

Term Typically Offered: F, SP, SU Prerequisite: Consent of instructor.

Elective course on various topics concerning security, strategy, policy, law, environment, or global society. 1 to 3 lectures. Formerly MGT 195 at Cal Maritime.

MGT 2200 Information Systems Management (3 units)

Term Typically Offered: SP

Hands-on experience using advanced features of Microsoft Excel. Basic to intermediate Excel functions including logic, lookup, and computational functions. Pivot tables and other data management techniques will be applied to real world business problems. Advanced charting and data visualization techniques. 3 lectures. Formerly MGT 200 at Cal Maritime.

MGT 2205 Organizational Behavior and Labor Relations (3 units)

Term Typically Offered: F

Overview of the functions of human relations. Human resource management, unionism, and the integration of business and government in controlling and planning the human resources of most organizations. 3 lectures. Formerly MGT 205 at Cal Maritime.

MGT 3310 Port and Terminal Management and Operations (3 units)

Term Typically Offered: SP

Prerequisite: One of the following: ECO 100, ECO 1100, NAU 108, or NAU 1108.

Overview of modern port and terminal operations, including logistics processes such as on-dock rail, strategic and tactical planning, harbor drayage, terminal gate protocols, equipment and cargo management, and integration of marine port and terminal operations with other modes of transportation. Introduction to several different types of marine terminals, including containerized liner facilities, dry bulk, and liquid bulk facilities, roro terminals, and others. Historical review of developments in maritime industry and policy. 3 lectures. Formerly MGT 310.

MGT 3355 Procurement and Negotiations (3 units)

Term Typically Offered: F, SP Prerequisite: Junior standing.

A quantitative study of strategic interaction, supply chain coordination, contract management, assortment planning, and vendor performance evaluation. 3 lectures. Formerly MGT 355 at Cal Maritime.

MGT 3360 Inventory and Material Handling (3 units)

Term Typically Offered: SP Prerequisite: Junior standing.

A study of best practices in the field of business logistics, including the transportation and distribution of products throughout a supply chain. 3 lectures. Formerly MGT 360 at Cal Maritime.

MGT 3380 Project Management (3 units)

Term Typically Offered: SP Prerequisite: Junior standing.

A survey of the knowledge, skills, tools, and techniques used to meet specific project requirements and execute projects effectively and efficiently. 3 lectures. Formerly MGT 380 at Cal Maritime.



MGT 3395 Special Topics (1-3 units)

Term Typically Offered: F, SP, SU Prerequisite: Consent of instructor.

Special topic courses are intended to enables each department to offer an elective course of study when faculty scholarship activities, the expertise of visiting faculty, or off-campus educational programs may afford a unique and worthwhile learning experience. 1 to 3 lectures. Formerly MGT 395 at Cal Maritime.

MGT 4400 Strategic Management (3 units)

Term Typically Offered: F Prerequisite: Junior standing.

Capstone course that requires computer modeling and the use of most of the courses in the business curriculum to solve problems in business management. Course is an integrative case study course and must use knowledge acquired in management, finance, accounting, and statistical analysis. 3 lectures. Formerly MGT 400 at Cal Maritime.

MGT 4410 Quantitative Managerial Methods (3 units)

Term Typically Offered: F

2026-28 or later. Upper-Div GE Area 2/5 2020-26 catalogs: Upper-Div GE Area B

Prerequisite: MTH 107 or MTH 1107; and MGT 200 or MGT 2200.

Practical applications of mathematical models for managerial decision-making. Basis for optimization of decisions; linear and integer programming; transportation problems, queuing theory and simulation. 3 lectures. Fulfills GE Areas Upper-Division 2 or Upper-Division 5 (GE Area Upper-Division B for students on the 2020-26 catalogs). Formerly MGT 410 at Cal Maritime.

MGT 4415 Operations Management (3 units)

Term Typically Offered: SP

Prerequisite: MTH 107 or MTH 1107.

Focuses on the concepts of production management. Discussion of manufacturing, service industry, production capacity, total quality management and general concepts of production management. 3 lectures. Formerly MGT 415 at Cal Maritime.

MGT 4420 Supply Chain Management (3 units)

Term Typically Offered: F Prerequisite: Junior Standing.

Basic techniques and strategic issues of global supply chain management, including the impact of culture, strategic planning, organization, and management control, which add value during the successful movement of products from their origins as raw materials to their final destinations as finished products. Customer service, e-commerce, facilities location, routing and pricing, storage, transportation, emerging technologies, and reengineering the supply chain. Examples will be drawn from supply chains including a maritime link. 3 lectures. Formerly MGT 420 at Cal Maritime.

MGT 4425 Quality Management (3 units)

Term Typically Offered: F, SP Prerequisite: Junior Standing.

Quality management improvement systems. Management of quality in manufacturing, service and public sectors; quality control and assurance; quality costs; Total Quality Management (TQM), Six-Sigma Process and the DMAIC approach; morality and ethics of quality; Statistical Quality Control methods; design and implementation of quality-related procedures; Statistical Process Control and capability Analyses. 3 lectures. Formerly MGT 425 at Cal Maritime.



MGT 4430 International Supply Chain (3 units)

Term Typically Offered: SP Prerequisite: Junior Standing.

Key issues associated with the design and management of international supply chains. Global dimensions of supply chains, the strategic sourcing process, the strategic value-adding role operations and distribution plays in the international supply chain, current transportation management strategies used to improve supply chain performance, the capabilities of an integrated supply chain information system, the coordination and integration of functions across the supply chain, the influence of competitive globalization drivers, uncertainty, risk and flexibility in the international supply chain context, aligning supply chains, reverse logistics systems. 3 lectures. Formerly MGT 430 at Cal Maritime.

MGT 4435 Marine Insurance (3 units)

Term Typically Offered: F Prerequisite: Junior standing.

Introduction to the history and types of marine insurance, its regulatory environment, types of ships, carriers, cargo, as well as forms, contracts, policies, different classes of risk, and types of claims. Chartering and brokerage are also introduced. Guest speaker visits as available. 3 lectures. Formerly MGT 435 at Cal Maritime.

MGT 4440 Logistics Cases and Analysis (3 units)

Term Typically Offered: SP Prerequisite: Senior standing.

Case studies in logistics management. Logistics planning and control, challenges and issues affecting international logistics, reverse logistics, strategic sourcing, risk analysis, supply chain technology integration, supply chain sustainability. 3 lectures. Formerly MGT 440 at Cal Maritime.

MGT 4445 Maritime Innovation (3 units)

Term Typically Offered: SP Prerequisite: Junior standing.

History of innovation in the maritime industry and an introduction to recent breakthroughs. Problem identification, innovation management, design thinking, building, hypothesis testing, and taking a new product or process to market (both internal and external). Types of innovation, innovation in groups, teams and organizations. 3 lectures. Formerly MGT 445 at Cal Maritime.