### GSB Courses

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<td>GSB 515</td>
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<td>GSB 517</td>
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**GBS 512. Quantitative Analysis. 4 units**

Term Typically Offered: F

Prerequisite: OCOB graduate standing or approval from the Associate Dean.

Focus on a variety of statistical techniques that help to transform data into useful information that can be used to make informed business predictions and decisions. Course may be offered in classroom-based, online, or hybrid format. 4 seminars.

**GBS 513. Organizational Behavior. 4 units**

Term Typically Offered: F

Prerequisite: OCOB graduate standing or approval from the Associate Dean.

Application of behavioral, social and organizational science concepts to management. Individual, team and organizational levels of analysis, including such topics as expectations, perception, motivation, communications, creativity, leadership, cultural and ethical behavior, group dynamics, team effectiveness, work design, organization change and development. 4 seminars.

**GBS 514. The Legal and Regulatory Environment of Business. 4 units**

Term Typically Offered: TBD

Prerequisite: OCOB graduate standing or approval from the Associate Dean.

Legal and regulatory environment in which business operates. Consideration of historical, societal, and global perspectives reflecting political, social and/or economic beliefs and values. Strong emphasis on fundamental concepts of law and analytical tools to understand interaction between law, ethics and management decisions. 4 seminars.

**GBS 516. Strategic Marketing Analytics. 4 units**

Term Typically Offered: W

Prerequisite: OCOB graduate standing or approval from the Associate Dean.

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. 4 lectures.

**GBS 517. Strategic People Analytics. 4 units**

Term Typically Offered: SP

Prerequisite: GSE 519; OCOB graduate standing or approval from the Associate Dean.

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. 4 lectures.
GSB 518. Essential Statistics for Business Analytics. 4 units
Term Typically Offered: SU
Prerequisite: OCOB graduate standing or approval from the instructor.
Statistics background needed for analysis of business data and econometrics. Topics include basics of probability theory, random variables, distribution functions, conditional distributions, independence, expectations, covariance, correlation, random samples, estimation, asymptotic theory, hypothesis testing, and confidence intervals. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

GSB 520. Data Management for Business Analytics. 4 units
Term Typically Offered: F
Prerequisite: OCOB graduate standing or approval from the Associate Dean.
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. Topics include the database development life cycle, data modeling, SQL programming, data quality and integration. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

GSB 521. Cloud Services & Applications for Business Analytics. 4 units
Term Typically Offered: W
Prerequisite: OCOB graduate standing or approval from the Associate Dean. Recommended: GSB 520.
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. 4 lectures.

GSB 522. Advanced Management Information Systems. 4 units
Term Typically Offered: TBD
Prerequisite: OCOB graduate standing or approval from the Associate Dean.
Analysis of the challenges, successes, and failures managers face when planning for and implementing information system initiatives, particularly enterprise systems such as supply chain management, customer relationship management and enterprise resource planning systems. Focus on the strategic and operational impact of emerging information technologies in modern day business management. Design and development of knowledge worker applications including database and decision support systems. 4 lectures.

GSB 523. Managerial Economics. 4 units
Term Typically Offered: W
Prerequisite: OCOB graduate standing or approval from the Associate Dean.
Managerial economics, or microeconomics, focuses on private markets. Choices made by firms and consumers within topics that include demand, supply, efficiency, marketing structure, and government intervention. Development of an analytical framework for analyzing how these topics are important for managers. 4 lectures.

GSB 524. Marketing Management. 4 units
Term Typically Offered: F
Prerequisite: OCOB graduate standing or approval from the Associate Dean.
Introduction to marketing management. Concepts and principles necessary to plan, direct and control the product, promotion, distribution and pricing strategies of the firm. 4 lectures.

GSB 525. Project Management. 4 units
Term Typically Offered: SU
Prerequisite: OCOB graduate standing or approval from the Associate Dean.
Focus on project management tools and processes required to establish priorities for and management of projects within normal and abnormal scope, money and time constraints. Planning, organizational and resource challenges common to a variety of project types. Product life cycle, normal operational, new product introduction and profit oriented product family projects reviewed in service and production environments. 4 lectures.

GSB 529. Effective Communication Skills for Managers. 4 units
Term Typically Offered: SU
Prerequisite: OCOB graduate standing or approval from the Associate Dean.
Enhancement of business writing and oral presentation skills, organized around two areas: 1) preparing written business documents and reports, and 2) professional oral presentation skills. Preparation of a variety of business reports and documents. Multiple business presentations. 4 lectures.

GSB 530. Data Analytics and Mining for Business. 4 units
Term Typically Offered: TBD
Prerequisite: OCOB graduate standing or approval from the Associate Dean.
Exploration of the concepts, tools and techniques of data mining in the business context, using case study and problem-solving approaches. Topics include multidimensional data modeling, predictive analytics, pattern discovery, forecasting, text mining, and data visualization. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

GSB 531. Managerial Finance. 4 units
Term Typically Offered: W
Prerequisite: OCOB graduate standing or approval from the Associate Dean.
Theories, practices and tools of corporate financial decision making. Topics include valuation of fixed income securities and stocks, capital budgeting, capital structure, dividends, and an overview of financial markets and institutions. Introduction to valuation of derivative securities, market efficiency, and agency costs. 4 seminars.

GSB 533. Aggregate Economics Analysis and Policy. 4 units
Term Typically Offered: SP
Prerequisite: OCOB graduate standing or approval from the Associate Dean.
Development of the theoretical and empirical framework of the macroeconomy in which businesses must operate. Topics include GDP, inflation, unemployment, interest rates and monetary and fiscal policies. The dynamics of the macroeconomic environment over time. 4 lectures.
GSB 534. Lean Operations Management. 4 units
Term Typically Offered: SP
Prerequisite: OCOB graduate standing or approval from the Associate Dean.

Introduction to the operations function and its interaction with other areas in an organization. Emphasis on applying lean six sigma thinking to achieve competitive advantage in cost, quality, time, and flexibility in manufacturing and service operations. 4 lectures. Course may be offered in classroom-based or online format.

GSB 536. Data Ethics for Business Analytics. 2 units
Term Typically Offered: SP
Prerequisite: GSB 520; and OCOB graduate standing or approval from the Associate Dean.

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. 2 lectures.

GSB 539. Graduate Internship in Business. 2-8 units
Term Typically Offered: W CR/NC
Prerequisite: OCOB graduate standing and formal petition with approval from the Associate Dean.

Correlation of experience and academic knowledge. Placement in a supervised business or public organization. A formal written proposal must be accepted by the Associate Dean of OCOB Graduate Programs before work begins. Credit/No Credit grading only.

GSB 544. Computing and Machine Learning for Business Analytics. 4 units
Term Typically Offered: F
Prerequisite: OCOB graduate standing or approval from the Associate Dean.

Use of computers for advanced data analysis in business analytics. Topics include computer programming using statistical software, data gathering and cleaning, and machine learning. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

GSB 545. Advanced Machine Learning for Business Analytics. 4 units
Term Typically Offered: SP
Prerequisite: GSB 544; and OCOB graduate standing or approval from the Associate Dean.

Use of computers for advanced machine learning in business analytics. Topics include boosting, ensemble learning, Bayesian methods, and various types of neural networks. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

GSB 550. Bayesian Econometrics. 4 units
Term Typically Offered: TBD
Prerequisite: GSE 520.

Introduction to Bayesian econometrics with a focus on business decision making. Making appropriate use of prior information; computation of posterior densities; Bayesian forecasting and policy evaluation; model selection and diagnostic tools; alternative loss functions tailored to specific business applications. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

GSB 551. Prescriptive Analytics. 4 units
Term Typically Offered: SP
Prerequisite: GSE 519 or GSE 520.

Monte Carlo simulation. Decision making under uncertainty. Linear and non-linear programming. Dynamic models of growth and arrivals. Model risk. Applications to finance, operations, strategic planning, and marketing. Course may be offered in classroom-based, online, or hybrid format. 4 lectures.

GSB 555. Negotiation. 4 units
Term Typically Offered: SP
Prerequisite: OCOB graduate standing or approval from the Associate Dean.

Theory and practice of negotiation in a variety of professional and managerial contexts (e.g., business acquisitions, compensation, business disputes, transfer pricing, inter- and intra-organizational) and in one-on-one, group, and team-based arrangements. Includes impact of culture, ethics, dispute resolution, coalitions and use of creativity to develop integrative solutions. Course may be offered in classroom-based, online, or hybrid format. 4 seminars.

GSB 556. Entrepreneurship and New Venture Management. 4 units
Term Typically Offered: W
Prerequisite: OCOB graduate standing or approval from the Associate Dean.

Exploration of entrepreneurship with emphasis on the formation and management of new business ventures. Analysis of typical operating problems of these firms and application of appropriate techniques for their solution. 4 seminars.

GSB 562. Seminar in General Management and Strategy. 4 units
Term Typically Offered: SP
Corequisite: OCOB graduate standing and GSB 511, GSB 513, GSB 523, GSB 531, GSB 533 and either GSB 512 or IME 503, and either GSB 524 or GSB 573; and either GSB 534 or IME 580, or approval from the Associate Dean.

Application of interdisciplinary skills to business and corporate strategy formulation and implementation. Analysis of interdependence between external environments and internal systems. Focus on responsibilities, tasks, and skills of general managers. Case studies, group problem solving. Integrating course of MBA core curriculum. Course satisfies comprehensive examination requirement. 4 seminars.

GSB 563. International Business Tour. 4 units
Term Typically Offered: TBD
Prerequisite: OCOB graduate standing or approval from the Associate Dean.

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, government offices, ministries, etc; interviews of managers and government officials. Conducted in English. Passport required. The Class Schedule will list topic selected. Total credit limited to 8 units. 2 seminars, 2 activities.
GSB 564. Entrepreneurial Finance. 4 units
Term Typically Offered: TBD
Prerequisite: GSB 531; and OCOB graduate standing or approval from the Associate Dean.

The process of financing new and fast-growing firms. Preparation of pro forma financial statements for a new venture. Readings on the venture capital process, from seed capital through the initial public offering (IPO). Valuation of firms seeking venture capital, and those planning their IPO. Valuing convertible securities. Real options valuation. 4 lectures.

GSB 569. Managing Technology in the International Legal Environment. 4 units
Term Typically Offered: TBD
Prerequisite: OCOB graduate standing or approval from the Associate Dean.

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. 4 seminars.

GSB 570. Selected Advanced Topics. 1-4 units
Term Typically Offered: TBD
Prerequisite: OCOB graduate standing or approval from the Associate Dean.

Directed group study of selected topics for advanced students. Total credit limited to 8 units. The Class Schedule will list topic selected. 1 to 4 seminars.

GSB 575. Career Readiness in Data Analytics. 1 unit
Term Typically Offered: W
Prerequisite: OCOB graduate standing or approval from the Associate Dean.

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 or online format. 1 lecture.

GSB 583. Management of Human Resources. 4 units
Term Typically Offered: TBD
Prerequisite: OCOB graduate standing or approval from the Associate Dean.

An overview of the major functional and support activities in the personnel/human resource field, including strategic human resource planning, job analysis, recruitment, selection, performance appraisal, compensation, employee rights, and employee safety and health. 4 seminars.

GSB 590. Energy and Environmental Finance. 4 units
Term Typically Offered: SP
Prerequisites: GSB 511, GSB 523, and GSB 531; or OCOB graduate standing or approval from the Associate Dean.

Overview of theory and practical tools to improve financing and investment decisions as they relate to the energy industry and markets, and achieve environmental objectives including 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. 4 lectures.

GSB 595. Managing Change. 4 units
Term Typically Offered: W
Prerequisite: OCOB graduate standing or approval from the Associate Dean.

The knowledge and the elementary skills/competencies needed to intervene in an organization in order to improve its effectiveness. Design and use of action to improve organizational effectiveness. 4 seminars.

GSB 597. Seminar in Selected Economic Problems. 4 units
Term Typically Offered: TBD
Prerequisite: GSB 523 and OCOB graduate standing or approval from the Associate Dean.

Selected economic problems analyzed at an advanced level in a particular field, such as international trade, public finance, urban, industrial organization or transportation. 4 seminars.