MGT 2180 Management Personal Computer Applications 3 (6) Personal computer applications that support managers. Students learn from hands-on work rather than lecture.

MGT 2970 Creative Inquiry-Management 1-3 (1-3) Students plan, develop, and execute a research project related to the field of management and present their findings. The development of the project includes lectures about research design, conduct, and data analysis. May be repeated for a maximum of six credits. Includes Honors sections.

MGT 3050 Economics of Transportation 3 (3) Topics include history and structure of transportation systems in the United States, the nature of transportation costs and rates, transportation systems as factors in industrial location, transportation policy, and the role of transportation in national security. Preq: Junior standing.

MGT (ECON) 3060 Managerial Economics 3 (3) Introduces tools of economic analysis in classifying problems in organizing and evaluating information, and in comparing alternative courses of action. Bridges the gap between economic theory and managerial practices. May not be used to satisfy requirements for a degree in Economics. May also be offered as ECON 3060. Preq: ECON 2110.

MGT 3070 Human Resource Management 3 (3) Principles, concepts, and techniques concerned with effective and efficient utilization of personnel. Emphasizes motivation, leadership, and human behavior related to employer-employee relations. Topics include personnel recruitment, classification, selection, training, development, and performance evaluation. Includes Honors sections. Preq: STAT 3090 or equivalent (IE 3610 or MATH 3020 or PSYC 3090).

MGT 3100 Intermediate Business Statistics 3 (3) Quantitative methods of the management scientist with applications to business and industrial problems. Topics include regression analysis, correlation analysis, analysis of variance, sampling, and nonparametric methods. Includes Honors sections. Preq: STAT 3090 or equivalent (IE 3610 or MATH 3020 or PSYC 3090); and MGT 2180 or equivalent (CPSC 2200).

MGT 3120 Decision Models for Management 3 (3) Exploration of ways in which management science decision models can help in making sound managerial decisions. Problem solving is Excel-based. Topics include linear programming, project scheduling, and simulation. Includes Honors sections. Preq: STAT 3090 or equivalent (IE 3610 or MATH 3020 or PSYC 3090); and MGT 2180 or equivalent (CPSC 2200).

MGT (ELE) 3150 New Venture Creation 3 (3) Through the development of a business plan, the course focuses on creating an organization capable of effectively exploiting a viable opportunity. Topics include organization strategy and design, start-up capital, operations and sourcing issues, leadership, team building, and management of rapid growth. May also be offered as ELE 3150. Preq: ELE 3010.

MGT 3170 Logistics Management 3 (3) Management of physical distribution and supply systems with emphasis on design concepts, cost determinants, and control. Preq: MGT 3120.

MGT 3180 Management of Information Systems 3 (3) Introduction to information systems concepts and applications in business. Topics include software, hardware, decision support and knowledge based systems, database, information systems design and implementation, and the management of information systems. Preq: MGT 2010.

MGT 3500 Introduction to Business Analytics 3 (3) Introduces students to the common language, terminology and concepts related to business analytics, as well as to the business analyst profession and ways to manage business problems using business analytics. Students learn foundational technical, business and statistical concepts and skills. Preq: ACCT 3220 or MGT 3180.

MGT 3510 Business Modeling, Analytics and Problem Solving 3 (3) Focuses on problem solving using statistics to analyze business data. Case studies are used to address business problems in data management, model fitting, model interpretation, and diagnostics. Model approaches include selected topics from multivariate analysis, exploratory data analysis, and linear models. Preq: MGT 3100.

MGT 3900 Operations Management 3 (3) Examines the role of operations management in both manufacturing and service organizations. Discusses the concepts, tools, and techniques for managing the operations function. Topics include operations strategy, design, planning, and control. Preq: STAT 3090 or equivalent (IE 3610 or MATH 3020 or PSYC 3090); and MGT 2180 or equivalent (CPSC 2200).

MGT 3980 Internship in Management 1-3 (1-3) Faculty-supervised management internship to give students learning opportunities that support their classroom experiences. Requires at least 150 hours of internship work per credit hour received. Course enrollment and internship must occur in the same semester. May be repeated for a maximum of three credits. To be taken Pass/No Pass only. Preq: Junior standing and a 2.0 cumulative grade-point average and consent of instructor.

MGT 4000 Management of Organizational Behavior 3 (3) Provides management students with a framework for understanding how behavior within business organizations is managed. Particular emphasis is on integrating management theory with recent developments in the behavioral sciences with distinct management applications. Theory, research, and business applications are considered. Preq: MGT 2180.

MGT 4020 Operations Planning and Control 3 (3) Managing, planning, and controlling production and service operations emphasizing demand forecasting, aggregate planning, production scheduling, and inventory management. Includes Honors sections. Preq: MGT 3900.

MGT 4030 Special Problems 1-3 (1-3) Students plan, develop, and execute a research project related to the field of management and defense studies. May be repeated for a maximum of six credits. Preq: Senior standing in Management.

MGT 4040 Advanced Statistical Quality Control 3 (3) Statistical quality control techniques as applied to all areas of quality control: process control, process capability, acceptance sampling, and economic aspects of quality decisions. Preq: MGT 3900.

MGT 4080 Lean Operations 3 (3) Examines the use of scientific methods for the design of operating systems for both manufacturing and services. Special emphasis is on the development of the Toyota Production System for continuous improvement and the application of the relevant techniques to the design of facilities, jobs, and systems. Preq: MGT 3900.

MGT 4110 Project Management 3 (3) Examination and application of the project management body of knowledge. This consists of theory, tools, and techniques to organize, plan, and control individuals, teams, quality, and operations while conducting a project. Preq: STAT 3090 or equivalent (IE 3610 or MATH 3020 or PSYC 3090).

MGT 4120 Sourcing and Supplier Management 3 (3) Provides an understanding of the key issues in selecting and developing suppliers. Provides a conceptual framework to understand purchasing's function within the firm and its role in supply chain management. Preq: MGT 3900.

MGT 4150 Business Strategy 3 (3) Capstone course for seniors. Various methods are used in analyzing complex business problems, requiring students to integrate their knowledge of all areas of business. Student participation and written and oral communications are stressed. Includes Honors sections. Students must take this course at Clemson University. Preq: FIN 3060 or 3110; and MGT 2100; and MKT 3010; and Senior standing.

MGT 4160 Special Topics in Human Resources 3 (3) In-depth examination of advanced topics in Human Resource Management based on the developments in the Human Resource profession and interests of faculty. Emphasizes the strategic formulation and application of these topics to support organizational leadership. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: MGT 3070 and MGT 4000.
MGT 4220 Small Business Management 3(3) Study of management of the small independently owned and operated business. Emphasizes analyzing new business opportunities, planning and establishing a growing concern, and managing the contemporary small business. Field experience in consulting with small businesses enhances students’ understanding of the unique opportunities and problems of small business organizations. Preq: MGT 3010.

MGT 4230 International Business Management 3(3) Survey of theoretical and institutional complexities of international business operations. Topics include exporting, importing, foreign investment, multinational corporations, and international payment system. Preq: Junior standing.

MGT 4240 Global Supply Chain Management 3(3) Design, planning, control, and improvement of supply chains for competing effectively in the context of global operations. Topics include supply chain structure and configuration, approaches to intraorganizational and interfirm integration, and complexities of material, information, and cash flows across international borders. Preq: MGT 3900.

MGT 4250 Compensation Management 3(3) Examination of compensation employees seek in exchange for their efforts and contributions. Topics include government and union influences; job content analysis, description, and evaluation; developing pay structures; measuring and paying for performance; employee benefits; administration of the compensation plan; executive, managerial, professional, and sales. Preq: MGT 3070 and MGT 4000.

MGT 4270 Managing Continuous Improvement 3(3) Examination of issues related to continuous improvement, including a systematic approach to selecting improvement areas, determining how to improve, plan, and manage the improvement process. Topics include selecting performance measurements, using teams to achieve breakthrough change, identifying root causes of problems, and developing and implementing solutions to problems. Preq: MGT 3900.

MGT 4300 Senior Seminar in Management 3(3) In-depth study of current business topics; allows senior management students to relate their academic studies to real-world problems. Senior paper is required. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: Senior standing.

MGT 4310 Employee Diversity, Rights, and Responsibilities 3(3) Focuses on employee and organizational rights and responsibilities. Topics include various types of discrimination (race, sex, religion, national origin, age, and disability status); drug and alcohol testing; AIDS in the workplace; employee discipline and termination issues; privacy and safety concerns; and union organizing campaigns. Preq: MGT 3070 or MGT 4000.

MGT 4350 Personnel Interviewing 3(3) Helps students understand current interviewing theory, conduct an employment interview, and advise their future employers how to improve interviewing programs. Topics include job analysis, legal issues, types of interviews, and evaluating applicants. Preq: MGT 3070 or MGT 4000.

MGT 4360 White-Collar Crime 3(3) White-collar crime and corruption are examined from a managerial perspective. Topics include financial crimes, crimes against consumers, environmental crimes, acts of institutional corruption, the impact of organized crime on legitimate businesses, and computer crime. Preq: Senior standing. Preq or concurrent enrollment: FIN 3060.

MGT IE 4400 Negotiations 3(3) Focuses on principles and practice in business negotiations. Topics include negotiating concepts, strategies, situational applications, and practice in applied techniques. Situations include negotiation in sales, customer relations, global nuances in negotiation situations, employee management, and career development. Preq: Senior standing.

MGT 4440 International Perspectives in Industrial Management 1-6(1-6) Provides an international perspective to industrial management via organized plant visits to businesses in a foreign country and lectures by and discussions with senior operations managers. Cultural visits and lectures are also organized to provide a holistic perspective to cover cultural and economic environment of the host country. Students are responsible for travel costs. May be repeated for a maximum of six credits. May also be offered as IE 4440. Preq: Consent of instructor.

MGT 4500 Advanced Business Analytics 3(3) Students’ understanding of how to manage and analyze business data to gain competitive advantages is deepened. Case studies, projects and real-world business problems are utilized to give opportunity for students to apply business and analytics skills and use business analytics software applications. Preq: MGT 3500.

MGT 4520 Business Analysis 3(3) Follows the traditional systems development life cycle (SDLC), although alternative methodologies are also discussed. Focuses on earlier phases of the SDLC, from IS planning through specification of structured requirements and on the methods, techniques, and tools used to determine information requirements and their unambiguous documentation. Preq: MGT 3180; or MGT 3180 or ACCT 3220; or MGT 4010 and CPSC 2150 and CPSC 2310.

MGT 4540 Systems Implementation 3(3) Builds upon skills of programming, database, and systems analysis and design by involving students with the later phases of the systems development life cycle (SDLC). Students design and develop a system using various platforms. Focus is on the logical and physical system design. Preq: MGT 3180.

MGT 4550 Emerging Information Technology Trends in Business 3(3) In-depth study, through case studies, readings, and hands-on experience, of emerging information technologies in and across business organizations. Focuses on understanding, effective deployment, and impact of these technologies on business outcomes. Preq: MGT 3180; or MGT 4010 and ACCT 3220; or MGT 4010 and CPSC 2150 and CPSC 2310.

MGT 4560 Business Information Management 3(3) In-depth study of business related data, information, and knowledge-based systems as well as business intelligence technologies and techniques, through readings, hands-on experience, and case studies. Emphasizes organizational decision-making and the ability to access data, information and knowledge-based assets where and when needed. Preq: MGT 3180; or MGT 4010 and ACCT 3220; or MGT 4010 and CPSC 2150 and CPSC 2310.

MGT 4900 Selected Topics in Industrial Management 3(3) In-depth examination of advanced topics in Industrial Management. Topics may vary in keeping with developments in the management profession and interests of faculty. Emphasizes the application of these topics to the production and operations management environment. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: MGT 4020 or 4040 or 4080.

MGT 4970 Creative Inquiry - Management 3(3) Students plan, develop, execute, and direct a research project related to the field of management and present their findings. The project includes lectures about research design, conduct, and data analysis. May be repeated for a maximum of six credits. Includes Honors sections.

MICROBIOLOGY

Professors R.S. Cohen, Chair, T.A. Hughes, X. Jiang, C.D. Rice, S.W. Scott, Y. Wei; Associate Professor: B.J. Campbell, M. Cao, J.M. Henson, H.D. Kurtz, T.L. McNelly, T.R. Tzeng; Assistant Professors V.P. Richards; Senior Lecturers J.G. Abercrombie, K.B. Rudolph; Lecturer K.J. Whitehead

MICR 1010 Microbes and Human Affairs 1(1) Introduces Microbiology majors to University career and library services, evaluation of computer program proficiency. Web page development, Microbiology emphasis areas, and Microbiology faculty. Students initiate their own Web-based student portfolios, which showcase their skills and experiences (e.g., résumés, accomplishments, and work samples) during their undergraduate programs. Preq or concurrent enrollment: BIOL 1030 and BIOL 1050; or BIOL 1100.

MICR 2050 Introductory Microbiology Laboratory 0(0) Non-credit laboratory to accompany MICR 2050. Core: MICR 2051.

MICR 2051 Introductory Microbiology 4(3) Basic concepts of microbiology, introduced through classroom and laboratory experiences. Emphasizes practical applications in various areas of importance to man. Recommended for students not majoring in a biological science. Not open to Microbiology majors. Preq: CH 1010; and one of the following combinations: BIOL 1030 and BIOL 1050; or BIOL 1100 and BIOL 1110. Core: MICR 2051.

MICR 3000 Essential Skills in Microbiology 3(3) Equips students with skills needed to achieve success in a variety of scientific fields, with emphasis on microbiology. The course focuses on career-building skills, scientific ethics, and scientific written communication.