Business Administration (BA)

Courses

BA 101 Introduction to Business Programs and Careers 1 Credit (1.0)

The student will assess and develop the personal and interpersonal dynamics and intellectual and social demands necessary to succeed in college. Time management, study skills, goal clarification, career concerns, and college resources are included in the course. Different aspects of careers in business will be discussed in depth. This course is available to freshmen only.

BA 125 Foundations in Business Data Analytics 3 Credits (3,0)

Introduction to the concepts of spreadsheet-based data manipulation and analysis for business applications. Creating, formatting, and working with with formulas, functions, charts; PivotTables, macros, and additional advanced features. Application of what-if analysis, sensitivity analysis, goal seeking, power pivot, and basic linear optimization modeling for management purposes.

BA 199 Special Topics in Business Administration 1-6 Credit Individual independent or directed studies of selected topics.

BA 201 Principles of Management 3 Credits (3,0)

Relevant management principles and practices as applied in organizations with focus on management theories, philosophies, and functions. Operating principles, activities, and theories that form the basis for the management functions of planning, organizing, leading, and controlling.

BA 215 Transportation Principles 3 Credits (3,0)

Basic principles of several modes of transportation, including air, sea, rail, automobile, transit, and pipeline. Operating characteristics of each mode; intermodal competition; compatibility; interconnectivity; and the importance of each mode in the economy, environmental issues, and future developmental prospects.

BA 225 Business Law 3 Credits (3,0)

This course is an overview of the law as it pertains to business relations and business transactions. Areas covered include procedure; torts; criminal law and procedure; constitutional law; administrative law; contracts; agency; real property; personal property; wills; trusts and estates; insurance law; employment law; commercial transactions; secured transactions; creditor/debtor law; and negotiable instruments. Areas of the law applicable to the aviation industry will also be covered.

BA 230 Advanced Computer Based Systems 3 Credits (3,0)

This course is a continuation of BA 120. It covers advanced concepts of spreadsheet use, database management systems, presentation graphics and Internet usage that will assist in problem analysis, worksheet management and exchanging spreadsheet data with other programs. It introduces the student to project planning, project scheduling and project tracking using computer software. In addition, the course provides experience in the basics of retrieving graphical and text-based information and also explores webpage design and development to support management activities.

Prerequisites: BA 120 or CS 120

BA 232 Techniques in Business Analytics 3 Credits (3,0)

Descriptive analytics using computational tools and languages that are capable of managing a large volume of complex data for managerial purposes. Structured query language for retrieving data from a relational database; functions in various statistical programming languages to combine, reshape, transform, and aggregate the data for producing a concise summary of facts, figures, and charts that provide insights for business decision making.

Prerequisites: BA 120 or BA 125 or CS 120

BA 299 Special Topics in Management 1-6 Credit

Individual independent or directed studies of selected topics.

BA 308 Public Administration 3 Credits (3,0)

Characteristics of organization and management in government; impact of political processes and public pressures on administration action; role of regulatory agencies; governmental personnel and budgetary procedures; unique qualifications of the public administrator.

Prerequisites: BA 201

BA 310 Airport Management 3 Credits (3,0)

Management and operation of the commercial service airports in the United States, emphasis on airport system facilities including landside, airside and airspace; rules and regulations governing airport operations, funding programs, airport security policies economic, political, environmental, and social role of airports.

Prerequisites: BA 201 or AS 120 or AS 121

BA 311 Marketing 3 Credits (3,0)

******OFFERED ON PRESCOTT CAMPUS ONLY******Marketing theory; marketing management, sales management; market research. Public and customer relations, advertising, distribution.

BA 314 Human Resource Management 3 Credits (3,0)

Relevant principles, processes, and practices as applied in organizations with focus on effectively managing human resources (HR) theories, philosophies, and functions. Interrelationship of managers, organizational staff and/or specialists. Areas of concentration include human resource planning; recruitment and selection; training and development; compensation and benefits; safety and health; international HR, and managing HR in small and entrepreneurial firms.

Prerequisites: BA 201

BA 315 Airline Management 3 Credits (3,0)

Introduction to the management aspects of commercial airlines: challenges of the industry, the hierarchy of decisions, business models, network structure, measures of performance, demand forecasting, market competition, schedule development, fleet assignment, crew scheduling, maintenance routing, revenue and pricing management, marketing and sales initiatives, and irregular operations management.

Prerequisites: BA 201

BA 317 Organizational Behavior 3 Credits (3,0)

Fundamental concepts of organizational behavior with an emphasis on research, theory, and practice.

Prerequisites: BA 201

BA 318 Entrepreneurship I 3 Credits (3,0)

An analysis of the theoretical and practical knowledge necessary to be successful in conceiving, initiating, organizing, and operating a small business is the main focus. Special focus will be placed on developing a business plan, business in aviation, and entrepreneurship.

Prerequisites: BA 201

BA 320 Business Information Systems 3 Credits (3,0)

Management approach to business information systems; general characteristics, potential, and limitations of business systems; the ways in which business systems are interrelated; the inherent management problems involved in the implementation and control of such systems; business analytics implementations.

Prerequisites: BA 230

BA 321 Aviation/Aerospace Systems Analysis Methods 3 Credits (3.0)

Overview of the system development life cycle. Emphasis on current system documentation through the use of both classical and structured tools/techniques for describing process flows, data flows, data structures, file designs, input and output designs, and program specifications.

Prerequisites: BA 320

BA 322 Aviation Insurance 3 Credits (3,0)

An introduction to the basic principles of insurance and risk with its special application to the aviation industry. An in-depth review of the aviation insurance industry in the United States including the market and types of aviation insurers. Pre-Requisite: Sophomore Standing.

Prerequisites: BA 201 and Sophomore standing

BA 324 Aviation Labor Relations 3 Credits (3,0)

Labor-management relations with applications to the aviation and aerospace industries. Historical development of management-workforce public policy and laws. Current methodologies, processes and tools used to promote cooperative workforce relations, to resolve workforce conflicts, and to promote employee trust in high reliability organizations.

Prerequisites: BA 201

BA 325 Social Responsibility and Ethics in Management 3 Credits (3,0)

Inquiry into ethics and social responsibility for managers. Economic, legal, political, environmental, technological social issues. Interactions between government, business, and society.

Prerequisites: BA 201 and COM 219 and COM 221

BA 327 Airline-Airport Operations 3 Credits (3,0)

Aspects of the dynamic relationship between airlines and airports; day-to-day challenges and current issues facing airline and airport management; airport and airline operational characteristics, regulatory implications, political and financial environment, and air service development through historical and contemporary perspectives.

Prerequisites: BA 201

BA 328 Professional Consulting 3 Credits (3,0)

A practical introduction to problem solving by learning to assess, develop, and contribute one's expertise to the solution of problems that organizations face in a global environment. Emphasis is given to problem recognition, definition, and solution. Various types of non-mathematical problem-solving strategies are explored such as consulting, strategic planning and management, organizational change, conflict resolution, and facilitation.

Prerequisites: Junior or Senior standing

BA 335 International Business 3 Credits (3,0)

Impact of foreign trade on the broader aviation industry and its contribution to economic development. Opportunities and threats of the complex environment of international business and current U.S. relations with other nations.

Prerequisites: BA 201

BA 336 Electronic Commerce 3 Credits (3,0)

E-commerce business strategies and tactics with applications in the aviation and aerospace marketplace. The role of the internet, intranets, portals, cloud based computing and social network marketing. E-commerce analytics and sales funnel tracking.

Prerequisites: MK 220 and (BA 230 or BA 232)

BA 343 Fraud Detection 3 Credits (3,0)

Understanding the various forms of occupational fraud. Principles of fraud detection and examination including skimming, cash larceny, billing schemes, check tempering, payroll schemes, register disbursement schemes, non-cash misappropriations, corruption, accounting principles and fraud, fraudulent financial statements, interviewing witnesses, and conducting investigations.

Prerequisites: ACC 210

BA 345 Business Law II 3 Credits (3,0)

This course will introduce the student to the substantive international and domestic law that applies to the aviation industry from a management perspective. Included is a study of the U.S. legal system; administrative law and the federal regulatory process; international law; domestic and international regulation of aviation; common law contracts and the Uniform Commercial Code; labor law; and antitrust law.

BA 352 Business Analytics for Decision Making 3 Credits (3,0)

Practical skills for optimization and decision analytics. Development, implementation, and utilization of optimization and managerial decision-making models in business. Applies various prescriptive analytics techniques for driving optimal business decisions based on a variety of data types.

Prerequisites: BA 232

BA 363 Supply Chain Management 3 Credits (3,0)

Introduction to key concepts of supply chain management (SCM); SCM role in efficiency and competitiveness of companies; applications of SCM in aviation and aerospace industries.

BA 399 Special Topics in Management 1-6 Credit

Individual independent or directed studies of selected topics.

BA 408 Airport Management 3 Credits (3,0)

******OFFERED ON PRESCOTT CAMPUS ONLY******An examination of the management of airports with an emphasis on the facilities that make up an airport system, including airspace, airfield, and terminal and ground access operations.

Prerequisites: BA 201

BA 410 Management of Air Cargo 3 Credits (3,0)

In-depth understanding of the air cargo industry and the complexities involved in the movement of air cargo to include the evolution of the air cargo industry, management of air cargo operations; regulations governing airfreight; significance to economy and society; and future growth of the industry.

Prerequisites: BA 215

BA 411 Logistics Management for Aviation/Aerospace 3 Credits

Optimization of the physical flow of goods and materials within a firm from acquisition through production, and movement through channels of distribution. Apply logistics theory to aviation management problems in materials handling, managing inventory, planning capacities, and locating distribution centers. Aviation/aerospace case studies analyzed with computer models.

Prerequisites: BA 201 and MA 222

BA 412 Airport Planning and Design 3 Credits (3,0)

Principles and essential elements of current U.S. and international airport planning and design trends; airport master planning and layout plans; geometric design and layout of the airfield and terminal facilities; obstruction analysis; signage and lighting; forecasting; airside and landside interface; capacity and delay effects; environmental planning.

Prerequisites: BA 310 and MA 222

BA 419 Aviation Maintenance Management 3 Credits (3,0)

This course provides a comprehensive examination of organizational maintenance policies; programs and procedures with an emphasis on maintenance planning; forecasting and cost control; reliability; safety and flight schedule performance. Note: This is a capstone course for the AOC in Maintenance Management for the Aviation Maintenance Science (AMS) degree.

Prerequisites: BA 201 and MA 222

BA 420 Management of Production and Operations 3 Credits (3,0)

Operations management in service-oriented and product-oriented organizations. Forecasting, inventory management, quality control, work design and measure, capacity planning, product and service design.

Prerequisites: MA 222 or MA 241

BA 421 Small Business Management 3 Credits (3,0)

******OFFERED ON PRESCOTT CAMPUS ONLY******An analysis of the theoretical and practical knowledge necessary to be successful in conceiving, initiating, organizing, and operating a small business. Special focus will be placed on small businesses in the aviation field.

Prerequisites: BA 201 and BA 210

BA 422 Life Cycle Analysis for Systems and Programs in Aviation/ Aerospace 3 Credits (3,0)

This course is a study of system theory and its relationship to aviation/ aerospace systems management. It covers a brief history of system theory and system life cycle and presents the major activities in each phase of a system's life cycle. Also covered are specific topics related to system design and support, including reliability, maintainability, availability, testing, quality control, customer support, product improvement program analysis, and the role of data collection and analysis in the operational phase. Related topics covered are cost-effectiveness analysis and project management. The course examines applications and case studies specific to aviation/aerospace, including military applications and computer simulation models.

Prerequisites: BA 201 and MA 222

BA 424 Project Management in Aviation Operations 3 Credits (3,0)

A comprehensive review of project management operations and procedures following the Project Management Institute guidelines. Project management focus on application of tools to enhance control over budget, schedule, staffing, resources allocation, and performance requirements. Additional topics include Lean, Agile, and Critical Chain project management techniques and application.

Prerequisites: MA 222 or MA 241

BA 425 Trends and Current Problems in Air Transportation 3 Credits (3.0)

This course assists students in building skills that allow them to identify trends and current problems in air transportation. These trends are related to market growth, airline network structure, competition, schedule change, aircraft size change, pricing, delays and on-time performance, and financial conditions. Students will use available databases to extract data, perform descriptive and statistical analysis, and derive conclusions.

Prerequisites: BA 201

BA 426 International Aviation Management 3 Credits (3,0)

An investigation of international aviation management and its three elements: the nature of international aviation business, working in a foreign environment, and managing in an international environment. Prerequisites: BA 335

BA 427 Management of Multicultural Workforce 3 Credits (3,0)

Management of the multicultural workforce. Elements of cultural anthropology pertaining to international business and communicating across cultures. Managing contrasting cultural values while maintaining organizational culture are addressed in the context of international aviation management.

Prerequisites: BA 201 and COM 219 and COM 221

BA 430 International Trade and Regulations 3 Credits (3,0)

Economic analysis of international trade, capital flows, and labor migration with particular emphasis on the laws governing these factors. Aviation applications include code-sharing and other international airline agreements and the impact of trade subsidies and open skies treaties. Prerequisites: EC 200 or EC 210 or EC 211

BA 437 Strategic Management and Consulting 3 Credits (3,0)

Problem recognition, definition, and solution in a consulting environment. Strategic planning and management; challenges to organizational change; negotiated scope of work; conflict facilitation and resolution.

Prerequisites: Senior Standing to be used only as an elective

BA 438 Entrepreneurship II 3 Credits (3,0)

The foundation concepts of effective new venture startups, such as management, marketing, finance, and growth are presented along with other considerations in entrepreneurial venture creation and the tools necessary to successfully grow technology ventures.

Prerequisites: BA 318

BA 452 Lean Six-Sigma in Aviation and Aerospace 3 Credits (3,0)

This course is a study of Lean Six Sigma (LSS) theory and its application within the aviation/aerospace systems and services environment. The course covers Six Sigma, JIT/Lean, and Lean Six Sigma (LSS) and presents the major activities that make each application unique as well as interdependent. Course material will be aligned with the DMAIC process methodology of implementation.

Prerequisites: BA 201 or Junior Standing

BA 490 Strategic Management 3 Credits (3.0)

Business capstone course that requires students to synthesize and integrate knowledge and skills attained in their undergraduate business program. Challenges students to examine and solve organizational problems in a capstone project setting. Utilizes strategic management principles and analytical frameworks as the foundation for business decision-making.

Prerequisites: Graduating Senior Standing and BA 352

BA 499 Special Topics in Management 1-6 Credit Individual independent or directed studies of selected topics.