

## Information Systems Course Descriptions

(Department of Information Systems and Operations Management)

**MIS 101. Introduction to Personal Computers Lab (1)** Computer lab enabling students of all majors to improve their computer fluency skills in the following areas: personal computers, file handling, operating systems, and Web searching skills. Elements of hardware, software, communications, ethics and privacy will be discussed.

**MIS 102. Computer Word Processing and Presentation Skills Lab (1)** Computer laboratory that enables students of all majors to improve their computer fluency skills in the following areas: word processing, presentation and communication software, and internet communication software.

**MIS 103. Computer Spreadsheet Skills Lab (1)** Computer laboratory enabling students of all majors to improve their computer fluency skills in the following areas: spreadsheet productivity software including financial, data, graphing and formula features.

**MIS 213. Introduction to Information Systems and Technology (3)** Survey of information systems use in organizations and the information technologies used to implement them. Scope includes hardware, software, and telecommunications concepts. Projects stress the use of computer applications to support decision-making, financial analysis, oral and written communications.

**MIS 216. Introduction to Business Application Development (3)** An introduction to computer programming in a business context using a modern high-level programming language. Topics include program flow constructs, programming logic, objects, and other basic programming techniques. Emphasis is on good style, and the creation of high-quality applications that help the organization.

**MIS 310. Web Page Development Languages (3)** Prerequisite: CSC 105 or MIS 105 or MIS 213 or consent of the department chair. Study of the design and creation of basic Web pages in the business environment. Topics include page structure, human computer interface design, style sheets, reusability, and design basics. An emphasis is placed on best industry practice.

**MIS 311. Information Systems Structures (3)** Prerequisites: ACG 201, MIS 213, and admission to Cameron School of Business. This course is intended for non-information systems majors. Scope includes the systems development life cycle, process modeling, and data modeling. Projects focus on methods for documenting information system structure and methods for managing and accessing data.

**MIS 312. Information Systems Hardware and Software (3)** Prerequisite: MIS 213 or consent of the department chair. Principles and application of computer hardware and software will be presented through lecture of the underpinnings, installation, configuration, and laboratory experiences. This course will provide the technology background for system developers to understand tradeoffs in architecture for effective use in a business environment. Networked computing systems and various operating systems will be covered.

**MIS 315. Management of Database Systems (3)** Prerequisite: MIS 213. Study of the design and administration of database systems in a business environment. The relational model is used along with database management software to facilitate the communication and distribution of data and its conversion into information, with an emphasis on sound design principles. Topics include entity-relationship modeling, normalization, and the structured query language (SQL).

**MIS 316. Business Application Development (3)** Prerequisite: Previous programming course such as MIS 216, CSC 112 or 121. Intermediate programming in a two-tier, event-driven, rapid application development context. Emphasis is on writing high-quality code that is easy to debug, test, and maintain, culminating in database interaction.

**MIS 317. Technology of E-Business (3)** Prerequisites: MKT 441 and admission to Cameron School of Business. A study of current technologies impacting a firm's ability to create and maintain an e-business presence. The course has two major topic thrusts. The first focus is the hardware necessary to support e-business, including telecommunication concepts, networks, wireless Web, firewalls, secure servers, and Internet protocols and standards. The second focus is the current advances in Web languages to enable transactions to be more transparent between companies. (This course does not satisfy any requirements or electives for students pursuing an IS option.)

**MIS 318. Global Information Systems (3)** Prerequisites: MIS 213 and MGT 350. Study of cultural, governmental, and technical factors in global information systems management. Technical topics include distributed architectures, international standards, localization mechanisms, and integration models. Non-technical topics include governmental, infrastructure, and cultural factors, and methods for managing distributed resources.

**MIS 323. Business Telecommunications (3)** Prerequisite: MIS 213. A study of the role of telecommunications in businesses, including relevant terminology, concepts, hardware, software, protocols and architectures. Topics include the design, purchase, integration, and use of telecommunications technologies and systems. Emphasis is placed on local area network technologies.

**MIS 324. Information Security and Assurance (3)** Prerequisite: Junior standing and MIS 213 or CSC 121. Examination of current standards of due care and best business practices in information security. Focus is on the evaluation and selection of optimal security posture. Topics include evaluation of security models, risk assessment, threat analysis, organizational technology evaluation, security implementation, disaster recovery planning and security policy formulation and implementation.

**MIS 411. Information Systems Analysis (3)** Prerequisites or corequisites: MIS 315 and admission to Cameron School of Business. An introduction to processes and methods used for identifying and documenting information requirements and developing system specifications. Topics include the systems development life cycle, analysis tools such as flowcharts and data flow diagrams, and techniques for effective written communication. Case studies are used.

**MIS 413. Systems Design/Capstone Project (3)** Prerequisites: MIS 316, 411 and admission to Cameron School of Business. Involves the analysis, design and implementation of a real world project employing a 3-tier development process. New skills introduced include advanced Web development concepts, emerging Web tools, and project management. Topics expanded are database design, systems analysis and design, UML, and technical communication.

**MIS 415. Emerging Information Technologies (3)** Prerequisites: MIS 213 and admission to Cameron School of Business. A study of current technologies impacting a firm's ability to create and maintain a competitive advantage through the use of information systems technology. Topics include hardware and software technologies that support the development of interactive Internet applications.

**MIS 491. Directed Individual Study (1-6)** Prerequisites: Junior or senior standing, consent of the department chair and admission to Cameron School of Business.

**MIS 495. Seminar in Information Systems (1-3)** Prerequisites: Junior or senior standing, consent of the department chair and admission to Cameron School of Business. This course may be repeated under a different subtitle.

**MIS 498. Internship in Information Systems (1-6)** Prerequisites: Senior status, consent of faculty supervisor and admission to Cameron School of Business. Involves the application of quantitative and systems skills developed in the academic environment to problems in a real-world operating environment. The participant will receive practical training and experience under the guidance of the staff of a local business or government organization and a faculty supervisor. Available internships are filled on a competitive basis.

**MIS 499. Honors Work in Information Systems (2-3)** Prerequisites: Senior standing and admission to Cameron School of Business. Independent work for honors students.