### **Information Systems**

#### IS100 Introduction to Computers and Society

Cr-4 I

This course satisfies the IS101 Computers and Society requirement for students with little or no prior computer experience. It focuses on providing a solid foundation in basic computer skills and terminology, and an understanding of how computer technology works. Experience is provided with a variety of microcomputer software applications, including word processing, electronic spreadsheets, and graphics, file management, and integrated software. Concepts and terms focus on preparing for a technology oriented society and using the computer as a tool for productivity, research and communication.

#### **IS101 Computers and Society**

Cr-3

This course provides knowledge of relevant computer skills and a solid foundation in the terminology and concepts of computer technology. Experience is provided with a variety of microcomputer software applications, including word processing, electronic spreadsheets, graphics, file management, and integrated software. Concepts and terms focus on preparing for a technologically oriented society and using the computer as a tool for productivity, research, and communication.

#### IS102 Computer Applications & Concepts 2

Cr-3

This course increases knowledge and productivity with the personal computer. Students gain knowledge of hardware and software and, by working with popular business applications software packages, increase their overall computer competency. The course emphasizes the use of the computer in the management of information. Areas of study include the MS DOS operating system, WINDOWS operating environment, sharing files among applications, incorporating graphics, report generation, and communications. Current computing issues such as computer ethics, computer crime and security are discussed. Prerequisite: IS101 Computers and Society or IS100 Introduction to Computers and Society

## IS120 Computer Operating Systems and Cr-3 Environments

This course covers the role of computer operating systems. It emphasizes operating systems and environments used with Intel-compatible equipment and discusses additional platforms. Command-line, menu-driven, and graphical user interface (GUI) systems are covered. Topics include storage devices, operating environment, system startup, menus, memory management, software package installation, and multitasking.

## IS125 Introduction to Multimedia Applications for Business

Cr-3

This course covers graphic tools used in business environments, including multimedia programs such as graphic, animation, and web design software. Multimedia files are imported and exported into documents and presentations. Topics include web design theory; color and composition; and graphic, animation and presentation software. It culminates with the integration of multimedia concepts incorporated into an integrated business project/presentation. Prerequisite: IS101 Computers and Society or IS100 Introduction to Computers and Society.

#### **IS130 Desktop Publishing for Business**

Cr-3

This course introduces the principles of desktop publishing in a business environment. Professional quality business documents are designed and produced that combine text, graphics, illustrations, and photographs in documents such as letterheads, business cards, flyers, brochures, promotional documents, and newsletters.

## IS200 Spreadsheet Concepts and Applications

Cr-3

This course expands the knowledge of those already familiar with the basic elements of electronic spreadsheets. It examines the various uses for a spreadsheet in business. Intermediate and advanced spreadsheet techniques are examined, including the power of functions, formatting, analytical graphics, and macros. Prerequisites: IS101 Computers and Society or IS100 Introduction to Computers and Society.

#### **IS201 Principles of Computer Security**

Cr-3

This course provides a comprehensive view of the field of computer and network security. Topics include the types of threats to computer hardware and software, public key infrastructure (PKI), certificate authorities, the protocols and standards involved in establishing PKIs, intrusion detection systems, and the laws which govern aspects of computer security. Prerequisite: IS101 Computers and Society is recommended but not required.

# IS208 Practical Computing for the TwentyFirst Century Professional Cr-3

This course introduces the concepts and issues related to the use of computers in the professional environment today. It examines the history of computer information systems as well as local and wide-area networking, file formats, data compression, operating systems, and the application of internet technologies. It covers basic procedures for selecting, installing, configuring, and maintaining hardware and software components. Prerequisite: IS101 Computers and Society or IS100 Introduction to Computers and Society.

#### **IS210 Database Design and Management**

Cr-3

This course will introduce students to basic database concepts. The course will focus on designing and structuring databases to meet the objectives of management. Students will use a database management system to complete an in-depth exploration of query capabilities and report generation. The student will learn the creation and management of a working database from the ground up. When the student completes this course, they will have the ability to create tables, queries, forms, and reports within database software and understand the role of a database within a business setting.

## IS220 Visual Basic with Business Applications

Cr-3

This course introduces event-driven programming for a better appreciation of Windows applications used in the business world. Controls, properties, and code are used to develop applications to solve business problems. Topics include decision-making statements, loops, multiple forms, and graphical displays. Prerequisites: IS200 Spreadsheet Concepts & Applications, and IS210 Database Design & Management.

#### **IS240 Networking Essentials**

Cr-3

This course provides an overview of networking concepts. Topics include LAN topologies, transmission media, protocols, network operating systems, and the OSI Model. Network security issues and network-to-network connections are also discussed. Through lecture and classroom demonstrations, students are exposed to the procedures involved in administering a LAN.

#### IS250 Web Development 1

Cr-3

This course focuses on the Internet and World Wide Web as valuable resources in gathering and disseminating business information. Information is gathered with various techniques and evaluated as to

its quality. Internet and World Wide Web (WWW) protocols and search engines are explored, and the techniques involved in creating a basic Web page are covered. Prerequisite: IS125 Introduction to Multimedia Applications for Business.

#### IS280 Web Development 2

Cr-3

This course emphasizes the development of effective and interactive Websites on the World Wide Web. Students create and code interactions to transform static Websites into dynamic Web applications. Focus is on hand-coded languages, such as PHP, ASP, VBS Script, and ColdFusion Markup Language. Students familiarize themselves with Website and database interaction using MySQL as a driving source behind the site. Specifically, students are exposed to web development programs that use features such as cascading style sheets, templates, frames, and behaviors, as well as the many other features common in web development programs, such as inserting and editing HTML. Students also study database elements and utilize coding in order to manipulate and display data on a web page. Prerequisite: IS250 Web Development 1 or CI110 Principles of Programming.