CIS C111: INFORMATION SYSTEMS, PROGRAMMING, AND DATABASE MANAGEMENT

Item	Value
Top Code	070200 - Computer Information Systems
Units	3 Total Units
Hours	68 Total Hours (Lecture Hours 54; Lab Hours 14)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S), • Pass/No Pass (B)

Course Description

Student will explore information systems and their role in business. Topics include information systems, database management systems, computer networking devices, e-commerce, ethics and security, and computer systems hardware and software components. Application of these concepts and methods through hands-on projects developing computer-based solutions to business problems. Meets the lower division computer requirement for business majors at some California State University campuses. ADVISORY: CIS C100. Transfer Credit: CSU; UC. C-ID: BUS 140, ITIS 120.**C-ID:** BUS 140, ITIS 120.

Course Level Student Learning Outcome(s)

1. Demonstrate knowledge of concepts and terminology associated with information systems, file and storage concepts, database management, and electronic spreadsheets.
2. Demonstrate introductory level programming techniques using web-based languages.
3. Given a business scenario, use electronic spreadsheet and database applications to solve basic business tasks.

Course Objectives

- 1. Describe the use of information systems in business environments and how individuals and society are impacted.
- 2. Identify database management techniques used in business environments.
- 3. Evaluate introductory level web-based programming techniques used in business environments.

Lecture Content

Introducing Today s Technologies: Computers, Devices, and the Web Connecting and Communicating Online: The Internet, Websites, and Media Computers and Mobile Devices: Evaluating Options for Home and Work Programs and Apps: Productivity, Graphics, Security, and Other Tools Digital Security, Ethics, and Privacy: Threats, Issues, and Defenses Computer Components: Processors, Memory, the Cloud, and More Input and Output: Extending Capabilities of Computers and Mobile Devices Digital Storage: Preserving Content Locally and in the Cloud Operating Systems: Managing, Coordinating, and Monitoring Resources Communicating Digital Content: Wired and Wireless Networks and Devices Building Solutions: Database, System, and Application Development Tools Working in the Enterprise: Systems, Certifications, and Careers

Lab Content

Introductory concepts of working with electronic spreadsheets Create and work with table data in electronic spreadsheets Create custom tables, lookup tables, and subtotals in electronic spreadsheets Plan, record, run, edit, and assign macros in electronic spreadsheets Customize data series, format and add chart elements in electronic spreadsheets Develop a Web page with hyperlinks using HTML format Develop linked Web pages with hyperlinks using HTML5 format and CSS3 Create multiple queries, build summary queries, and build crosstab queries in database software Add combo boxes, command buttons, option groups, and tab controls in database software Use report design view, apply conditional formatting, create summary reports in database software

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- DE Online Lecture (02X)
- Lab (04)
- DE Live Online Lab (04S)
- DE Online Lab (04X)

Instructional Techniques

Learning strategies might include lecture, one-on-one interaction, small-group activities, and hands-on demonstration. Student evaluation methods might include computerized quizzes, computerized tests, discussion forums, and hands-on assignment demonstration.

Reading Assignments

Read about security and computer concepts for business scenarios. Read about uses of electronic spreadsheets in a business environment. Read about database management techniques.

Writing Assignments

Written assignments based on security and computer concepts. Discussions based on e-business and information systems used in business.

Out-of-class Assignments

Written assignments based on security and computer concepts. Hands-on projects using electronic spreadsheets. Hands-on projects with hypertext markup language. Hands-on projects using database management software.

Demonstration of Critical Thinking

Problem-solving to find appropriate computer components based on business scenario Assessment of best practices using features of electronic spreadsheets Troubleshooting issues with HTML5 and CSS3 coding Setting up database structures

Required Writing, Problem Solving, Skills Demonstration

Project-based assignments designed to solve business scenarios Spreadsheet problem-solving and analysis Analysis of business scenarios with proposed solutions One to three computer-based skills demonstrations per module

Eligible Disciplines

Computer information systems (computer network installation, microcomputer ...: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience.

Textbooks Resources

1. Required Vermaat, M., Sebok, S. Enhanced Discovering Computers 2018, ed. Cengage Learning, 2018 Rationale: - 2. Required Freund, S., Starks, J. Microsoft Office 365 Excel 2019: Comprehensive, ed. Cengage Learning, 2020 3. Required Minnick, J., Friedrichsen, L. HTML5 and CSS3: Introductory, 8th ed. Cengage Learning, 2016 Rationale: - Legacy Textbook Transfer Data: Legacy text 4. Required Cable, S., Monk, E. Microsoft Office 365 Access 2019: Comprehensive, 1st ed. Boston: Cengage Learning, 2020

Other Resources

1. Coastline Library