Miami Dade College

ACG 4401 Accounting Information Systems

Course Description

This is an information systems course for accounting students, and not a traditional accounting course, nor a traditional MIS course. The course aims to provide students with a broad conceptual knowledge of accounting information systems, the need for and control of accounting information systems, current topics in accounting information systems, and discussions of specific transaction-cycle based accounting information systems. The course seeks to examine the linkages between information systems and accounting, and it also provides an overview of how to store, retrieve, analyze, and control data using information systems. Prerequisites: ACG 3113 and ACG 3343. Students must pass this course with a grade of "C" or higher.

Course Competency	Learning Outcomes
Competency 1: The student will understand the Accounting Information System by:	Critical thinking Numbers / Data Computer / Technology Usage Information Literacy
1. Recognizing the primary information flows within the business environment. 2. Understanding the difference between accounting information systems and management information systems. 3. Knowing the principal features of the general model for information systems. 4. Distinguishing between external auditing, internal auditing, and advisory services as they relate to accounting information systems. 5. Understanding the broad objectives of transaction cycles. 6. Understanding the relationship between traditional accounting records and their digital equivalents in computer-based systems. 7. Recognizing the documentation.techniques used for representing manual procedures and the computer components of systems.	

8. Understanding the broad issues pertaining to business ethics. 9. Having a basic understanding of ethical issues related to the use of information technology. 10. Distinguishing between management fraud and employee fraud. 11. Being familiar with common types of fraud schemes. 12. Understanding the objectives and application of both physical and IT control activities.	
Competency 2: The student will learn the transaction cycles and business processes by:	Information Literacy Numbers / Data Computer / Technology Usage Critical thinking
1. Understanding the fundamental tasks performed in the revenue cycle regardless of the technology in place. 2. Recognizing the fundamental tasks that constitute the purchases and cash disbursements process. 3. Identifying the fundamental tasks that constitute the payroll and fixed asset processes. 4. Identifying the functional departments involved in the business processes and tracing the flow of the transaction cycles through the organization. 5. Specifying the documents, journals, and accounts that provide audit trails, promotes the maintenance of historical records, support internal decision making, and sustain financial reporting. 6. Understanding the risks associated with revenue cycle, purchases and cash disbursements activities, payroll and fixed asset processes, and be familiar with the controls that reduce these risks. 7. Understanding the basic elements and procedures encompassing a traditional production process.	

8. Understanding the data flows and procedures in a traditional cost accounting system. 9. Understanding the shortcomings of traditional accounting methods in a world-class environment. 10. Recognizing the key features of activity-based costing and value stream accounting. 11. Understanding the operational features of the general ledger system (GLS), financial reporting system (FRS), and management reporting system (MRS). 12. Identifying the elements of a responsibility accounting system. 13. Be familiar with data analytics concepts and techniques.	
Competency 3: The student will understand the advanced technologies in accounting information by:	Information Literacy Numbers / Data Computer / Technology Usage Critical thinking
1. Understanding the operational problems inherent in the flat-file approach to data management that gave rise to the database concept. 2. Identifying the stages in database design, including entity identification, data modeling, constructing the physical database, and preparing user views. 3. Understanding the operational features of distributed databases and recognize the issues that need to be considered in deciding on a particular database configuration. 4. Recognizing the economic foundations of the resources, events, and agents (REA) model. 5. Understanding the key differences between traditional entity relationship modeling and REA modeling. 6. Creating an entity-wide REA diagram by applying the view integration steps to a	

business case. 7. Understanding the general functionality and key elements of ERP (Enterprise Resource Planning) systems. 8. Recognizing the various aspects of ERP configuration, including servers, databases, and the use of bolt-on software. 9. Understanding the purpose of data warehousing as a strategic tool and recognize the issues related to the design, maintenance, and operation of a data warehouse. 10. Identifying the internal control and auditing implications associated with ERPs. 11. Understanding the business benefits associated with Internet commerce and being aware of several Internet business models. 12. Recognizing issues of security,assurance, and trust pertaining to electronic commerce.	
Competency 4: The student will identify systems development activities by:	Critical thinking Information Literacy Numbers / Data Computer / Technology Usage
1. Identifying the key stages in the SDLC (Systems Development Life Cycle). 2. Recognizing how a firm's business strategy will shape its information system. 3. Understanding the Technical, Economic, Legal, Operational, and Schedule (TELOS) model for assessing project feasibility. 4. Familiarizing with cost-benefit analysis issues related to information systems projects. 5. Understanding the role of accountants in the SDLC.	
Competency 5: The student will identify computer controls and IT auditing by:	Critical thinking

	Computer / Technology Usage Numbers / Data Information Literacy
1. Recognizing the structure of a financial audit and the role of the IT audit component. 2. Understanding the key features of Sections 302 and 404 of the Sarbanes-Oxley Act. 3. Understanding management and auditor responsibilities under Sections 302 & 404. 4. Recognizing the risks of incompatible functions and how to structure the IT function. 5. Understanding the key elements of a disaster recovery plan. 6. Identifying the benefits, risks, and audit it issues related to information technology outsourcing. 7. Identifying the principal threats to the operating system and the control techniques used to minimize the possibility of actual exposures. 8. Recognizing the principal risks associated with electronic commerce conducted over intranets and the Internet and understand-ding the control techniques used to reduce these risks. 9. Recognizing the unique exposures that arise in connection with electronic data interchange and understand how these exposures can be reduced. 10. Describing the controls and audit tests relevant to the systems development process. 11. Understanding the risks and controls associated with program change procedures and the role of the source program library. 12. Recognizing the computer-assisted auditing techniques (CAATTs) used to verify the effective functioning of application controls. 13. Understanding the auditing techniques used to perform substantive tests in an IT environment.	

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