



## Course Syllabus

### ACCT 533 - Advanced Accounting Information Systems

Academic Year 2023-24

Center/Online Session 3: 01/08/2024 - 02/29/2024

Online classroom located at [uiulearn.uiu.edu](https://uiulearn.uiu.edu)

#### Instructor Information

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**Instructor Name:** Dana Leland

**UIU Faculty Email:** lelandd@uiu.edu

**Telephone Number:** 210-8440-565

**Office Location:** Online

**Availability:** By appointment.

#### Course Description

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**Semester Credits:** 3 credits

**Catalog Course Description:** Students explore advanced topics in Accounting Information Systems (AIS) needed to understand and use technologies in making decisions in key practice areas of the accounting profession: managerial accounting, financial accounting, auditing, and tax accounting. Course topics include the technologies involved in AIS, types of AIS applications and systems, use of systems technology and database concepts as a philosophy of AIS, internal control issues of AIS, audit issues related to AIS, and systems development issues including the Software Development Life Cycle and current trends in AIS design. Prerequisite: Undergraduate degree in

accounting or 30 semester credits of undergraduate accounting

**Prerequisites:** None

**Credit Hour Policy:** As a requirement of HLC Accreditation, all UIU courses, regardless of meeting schedule or instructional mode, follow the Federal Credit Hour Definition. As such, each credit hour earned at UIU is equivalent to a minimum of 45 hours of student engagement.

*For more information on how specific instructional modes meet this requirement, please see UIU's Policy Guidelines for Instructional Time Expectations: [UIU Policies](#).*

### Course Required Materials & Resources

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It is the student's responsibility to make sure the student has access to all required course materials by the start of the session.

### **Log Into Your uiuLearn Classroom To See Your Course Materials**

**Edition:** NONE

**Publisher:** MBS Textbook Exchange Inc.

**Format:** Hardback

**Ordering Textbooks.** Purchase your textbook through the online university bookstore, [BNC Virtual](#), or by phone at (800) 325-3252.

### Course Outcomes

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- ◆ The students will be able to develop awareness of threats to effectiveness of operations and to the reliability of accounting information.
- ◆ The students will be able to develop abilities to address identified threats.
- ◆ The students will be able to develop abilities to analyze the risk of errors and fraud.
- ◆ The students will be able to analyze the effectiveness and cost of various internal control plans.
- ◆ The students will be able to summarize the importance of ethical behavior within a computerized AIS environment.

## Course Requirements and Grading Criteria

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### Assignments and Assessments

#### Unit Homework and Quizzes:

These items will be completed within our MindTap course.

#### Unit Questions:

Answered within a Word document and submitted to the assigned dropbox.

#### Course Project:

We have covered documentation, database management, internal controls, and system processes during the past few units. Prepare a paper examining the evolution of IS (information systems) within a particular industry (your choice, such as manufacturing, banking, etc.). Conduct research on how information systems have impacted your chosen industry. Discuss the pros and cons of information systems. Think about ways systems have revolutionized the way we do business – from both locally to globally. Link our course topics to specific examples of how your industry has changed the way it conducts business. Has it made it more efficient? If so, how? Be creative. Illustrations and visuals are welcome. This paper should be a minimum of 2,000 words. Ten to fifteen sources are required. APA style should be followed.

<b>Criteria</b>	<b>Points Percentage</b>
Final Project	30%
Unit Questions	20%
Unit Homework	20%
Unit Quizzes	30%
Total	100

### Grading Scale

<b>Letter Grade</b>	<b>Points / Percentage</b>
A	100-93%
A- (minus)	92-90%
B+	89-87.5%
B	87.4-82.5%
B- (minus)	82.4-80%
C+	79-77.5%

C	77.4-72.5%
C- (minus)	72.4-70%
F	Below 69%

## Grades and Feedback

Grades will be updated daily to ensure students are building on prior concepts for each unit.

## Turnitin

Turnitin is a tool for both teachers and students to ensure academic integrity by checking the originality of submitted papers to avoid issues of plagiarism and academic dishonesty. Students should be aware that Turnitin scans submitted work and compares it to ALL other sources on file.

## Incompletes

Occasionally it becomes necessary for an instructor to award a student a grade of incomplete ("I"). An incomplete grade is exceptional and given only to students whose complete coursework has been qualitatively satisfactory but who have been unable to complete all course requirements because of documented cases of injury, illness, death in family, personal crisis, military deployments, or other circumstances beyond their control. This grade should not be awarded in cases where the student "fell behind" due to absences without explanation, other class commitments, and/or work obligations.

## **Course Schedule**

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### **Unit 1:**

**Topic:** Introduction to Accounting Information Systems & Enterprise Systems

### **Learning Outcomes:**

- Explain the complex, dynamic environment in which accounting is practiced.
- Identify the attributes of information.
- Describe how information is used for different types of decisions and at various levels in the organization.
- Recognize the accountant's role in relation to the current environment for the AIS.
- Describe enterprise systems and enterprise resource planning systems.
- Describe the relationship of the organization value chain and an enterprise system.
- Demonstrate the value of systems integration.
- Describe how an enterprise system supports major business event processes.

### **Reading Assignment(s): Chapter 1 & 2**

## Unit 1 Deliverables

### Unit 1 Questions

Answer the following questions in 2 pages. Include relevant sources to support your findings.

1. What are the essential elements of an accounting information system?
2. What does AIS mean to you? How do you incorporate AIS into your daily life?
3. Does the presence or absence of computers and other forms of information technology determine whether or not a business has an accounting information system?

### Unit Homework Mindtap

### Unit Quizzes Mindtap

## Unit 2:

Topic: Electronic Business (E-Business) Systems & Documenting Information Systems

### Learning Outcomes:

- Recognize the possible changes to organizational processes that occur when E-business is introduced.
- Identify the major approaches used to record and transfer electronic data during business event processing.
- Recognize the complexities surrounding electronic data interchange (EDI) implementation that are introduced when linking two different organizations' computer systems for joint business event data processing.
- Relate to the challenges faced by organizations when they pursue direct business links with customers via the Internet or other networks.
- Read and evaluate data flow diagrams.
- Read and evaluate systems flowcharts.

### Reading Assignment(s): Chapters 3-4

## Unit 2 Deliverables

### Assignment

#### Unit 2 Questions

Answer the following questions in 2 pages. Include relevant sources to support your findings.

1. One of [Amazon.com](https://www.amazon.com)'s marketing strengths is the capability to collect and analyze customer purchase data. How does this add value to the company? From the customer's perspective, is value added?

2. Why is it important to have standards, such as X12 and EDIFACT, when conducting EDI transactions and other forms of E-business? Is there a downside to using standards? How does Internet EDI differ from traditional EDI in process? In result?

3. "PCAOB Audit Standard No. 5 (AS5) paragraph 37 and Statement on Auditing Standard Section 319 (AU 319) paragraph 75 suggest that management, business process owners, and auditors prepare and analyze systems documentation to understand the flow of transactions through a process and to identify and assess the effectiveness of the design of internal controls. However, organizations, internal audit departments, and public accounting firms have developed their own methods for documenting systems. Therefore, I am not going to learn to prepare systems documentation until I know exactly what technique I will need to use in my job." Do you agree? Discuss fully.

Unit Homework Mindtap

Unit Quizzes Mindtap

### Unit 3:

Topic: Database Management Systems & Relational Databases and SQL

#### Learning Outcomes:

- Describe the limitations of traditional application approaches to managing data.
- Analyze the advantages gained by using the centralized database approach to managing data.
- Explain the importance of advanced database applications in decision support and knowledge management.
- Understand the basic aspects of business intelligence (BI) and appreciate its importance to the business community.
- Understand the techniques used to model complex accounting phenomena in an entity-relationship (E-R) diagram.
- Develop E-R diagrams that model effective accounting database structures using the resources-events-agents (REA) approach.
- Recognize the components of relational tables and the keys to effective relational database design.

#### Reading Assignment(s): Chapters 5-6

#### Unit 3 Deliverables

Assignment

Unit 3 Questions

Answer the following questions in 2 pages. Include relevant sources to support your findings.

1. What are the basic principles and design considerations for a REA model? How does the REA model facilitate the design of a relational database?
2. "The centralized database approach to data management is a good alternative to using enterprise systems such as ERP and CRM." Do you agree? Discuss fully.
3. Research the school library and/or Internet and find a great article on one of the topics we studied. Summarize the article in a paragraph and link it to our lesson. Make sure to share the link.

Unit Homework Mindtap

Unit Quizzes Mindtap

#### Unit 4:

Topic: Controlling Information Systems

#### Learning Outcomes:

- Summarize the eight elements of COSO's Enterprise Risk Management—Integrated Framework.
- Understand that management employs internal control systems as part of organizational and IT governance initiatives.
- Describe how internal control systems help organizations achieve objectives and respond to risks.
- Explain how pervasive controls help to ensure continuous and reliable operational and IT processes.
- Evaluate the appropriate segregation of duties within a transaction process.
- Comprehend the internal control implications inherent in company employment policies.
- Learn the major controls used to manage the design and implementation of new processes, especially new IT processes.
- Understand the COBIT 5 framework and its impact on the governance of enterprise IT.
- Describe the steps required to build a control matrix.

#### Reading Assignment(s): Chapters 7-9

#### Unit 4 Deliverables

##### Assignment

##### Unit 4 Questions

Answer the following questions in 2 pages. Include relevant sources to support your findings.

1. What is the CoBIT framework? How does it relate to the topics discussed in this chapter? Explain.

2. What are the appropriate segregation of duties within a transaction process? Explain.
3. How does your own organization utilize an internal control system to achieve objectives and respond to risks? Explain.
Unit Homework Mindtap
Unit Quizzes Mindtap

**Unit 5:**

Topic: The Order Entry/Sales (OE/S) Process, The Billing/Accounts Receivable/Cash Receipts (B/AR/CR) Process, & The Purchasing Process

**Learning Outcomes:**

- Describe the relationship between the OE/S process and its business environment.
- Depict the typical logical and physical characteristics of the OE/S process.
- Describe the relationship between the B/AR/CR process and its business environment.
- Summarize how enterprise systems, E-business, and other technologies can improve the effectiveness of the B/AR/CR process.
- Describe the relationship between the purchasing process and its business environment, including the organization’s supply chain.
- Understand the implications of implementing a supply chain management (SCM) system in a global business environment.
- Summarize how enterprise systems, e-business, and other technologies can improve the effectiveness of the purchasing process.
- Identify the logical activities and physical characteristics of a typical purchasing process.
- Prepare a control matrix for a typical purchasing process, including an explanation of how business process control plans can accomplish operations and information process control goals.

**Reading Assignment(s): Chapters 10-12**

**Unit 5 Deliverables**

Assignment
Unit 5 Questions Answer the following questions in 2 pages. Include relevant sources to support your findings.
1. Based on the definition of float presented in the chapter, discuss several possibilities for improving the cash float for your company, assuming you are the cashier.
2. "A control plan that helps to attain operational effectiveness by providing assurance of creditworthiness of customers also helps to



achieve the information process control goal of sales order input validity." Do you agree? Explain fully.

3. How do you determine what groceries (ex. bread, milk, peanut butter, toilet paper, etc.) you need to buy for your household? Have you ever run out of an essential product? How do you determine what quantity to buy when you go to the grocery store? Are you "overstocked" on any household product? Could you implement a reorder point or EOQ system for your home? Explain fully.

Unit Homework Mindtap

Unit Quizzes Mindtap

## Unit 6:

Topic: The Accounts Payable/Cash Disbursements (AP/CD) Process, The Human Resources (HR) Management and Payroll Processes, & Integrated Production Processes (IPPs)

### Learning Outcomes:

- Describe the relationship between the AP/CD process and its business environment.
- Summarize how various technologies, including e-invoicing and e-payments, can improve the effectiveness of the AP/CD process.
- Define and understand the basic functions of the HR management and payroll processes. Describe the relationship between the HR management and payroll processes and their environment.
- Depict the logical and physical elements of the HR management and payroll processes. Describe some of the technology used to implement the HR management and payroll processes.
- Describe the forces that exist in the contemporary production environment and the trends that have emerged.
- Discuss the role of enterprise systems (ESs) in the integration of the total manufacturing environment.
- Identify the key inputs, outputs, data, processes, and terminology included in modern integrated production processes (IPPs).
- Explain the relationship between IPPs and other key business processes within a manufacturing organization, including HR management, purchasing, order entry/sales (OE/S), and inventory management.
- Describe the role of inventory management systems and their relationship to IPPs.

### Reading Assignment(s): Chapters 13-15

### Unit 6 Deliverables

Assignment

Unit 6 Questions

Answer the following questions in 2 pages. Include relevant sources to support your findings.

1. The readings discuss both fraud and non-fraudulent losses in the AP/CD process. Describe any losses you have encountered in your personal bill paying process. Did you change any aspect of your bill paying process after the loss(es) you encountered?
2. What industry do you believe is a leader in enterprise systems implementations? Discuss what you think are the major contributing reasons for that leadership.
3. With the convergence of U.S. GAAP and IFRS standards moving forward, there is the possibility of the elimination of the LIFO inventory valuation method. If this happens, what will be the impact on manufacturing operations?

Unit Homework Mindtap

Unit Quizzes Mindtap

### Unit 7:

Topics: The General Ledger and Business Reporting (GL/BR) Process & Acquiring and Implementing Accounting Information Systems

### Learning Outcomes:

- Recognize how the GL and business reporting (BR) subsystems support an organization's external and internal reporting functions.
- Recognize the limitations of the traditional GL approach in contemporary systems.
- Describe the technological trends and advances in reporting.
- Analyze control issues and control plans associated with the GL and related BR extensions.
- Describe the systems acquisition/development process and its major phases and steps.
- Distinguish between the development processes for acquiring a system from an outside source and developing a system in-house.
- Discuss the nature and importance of the accountant's involvement in the systems acquisition/development process.

### Reading Assignment(s): Chapters 16-17

### Unit 7 Deliverables

#### Assignment

#### Unit 7 Questions

Answer the following questions in 2 pages. Include relevant sources to support your findings.

1. Why do we organize AIS courses in terms of business processes?
2. "Overstating receivables will keep the bank from calling our loan. Although some may think it is fraud, no one is really hurt." Why do you agree (or disagree) with this statement?

3. Sometimes, students comment that they are studying to be an accountant, not an information system worker. Discuss the flaw in such reasoning.

Unit Homework Mindtap

Unit Quizzes Mindtap

### Unit 8:

Topics: Final Reflection

### Learning Outcomes:

- Review the class material from the past seven units.

**Reading Assignment(s): none**

### Unit 8 Deliverables

Assignment
<p>Unit 8 Question</p> <p>Consider the material that we have examined in this course including accounting, finance, and innovative technology. What did you find that you think will become most useful in your career as a manager or professional?</p>
<p>Final Project</p> <p>We have covered documentation, database management, internal controls, and system processes during the past few units. Prepare a paper examining the evolution of IS (information systems) within a particular industry (your choice, such as manufacturing, banking, etc.). Conduct research on how information systems have impacted your chosen industry. Discuss the pros and cons of information systems. Think about ways systems have revolutionized the way we do business – from locally to globally. Link our course topics to specific examples of how your industry has changed the way it conducts business. Has it made it more efficient? If so, how? Be creative. Illustrations and visuals are welcome. This paper should be a minimum of 2,000 words. Ten to fifteen sources are required. APA style should be followed.</p>

## Course Expectations

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### Email

Upper Iowa University employees and students are issued a UIU email account (doej@uiu.edu). University email communications will only be sent to UIU email address. Faculty and staff are not obligated to respond to students using non-UIU email accounts.

### Technology Requirements

Students and faculty should have access to a reliable up-to-date computer, updated virus protection, and an Internet connection to access course materials and complete course requirements.

### **Late Work**

No work may be submitted after the last day of class. There are NO extra assignments or make up work in the class.

### **Professional Writing and Speaking Guidelines**

Communications in class and online should follow the Student Conduct and Discipline, Respect for the University Environment, and Code of Student Responsibility in the [Student Handbook](#). Respect the opinions of others using appropriate language and communications.

### **University Policies**

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University Policies are listed in detail within the course content on uiuLearn. Students are responsible for reviewing and understanding the applicable policies.

### **Academic Misconduct**

Cheating, academic dishonesty, and plagiarism constitute a violation of the offender's integrity, as well as the integrity of the entire University; they will not be tolerated. Violators will receive sanctions based on the level of academic misconduct. Policy AA-107.2 can be found [here](#).

### **Video Conference and Attendance**

Students are expected to attend class via the learning experience in which they are registered for a course: In Face-to-Face, Hybrid, and Video Conference Courses; with instructor consent, students may attend the course via synchronous video conference (i.e., Zoom) and be counted present for attending the class session for up to two consecutive class periods. Policy AA-125 can be found [here](#).

## **Academic Accommodations**

It is the policy of Upper Iowa University to ensure equal access to educational and co-curricular activities to students with disabilities as mandated by the Americans with Disabilities Act Amendments Act (ADAAA) and Section 504 of the Rehabilitation Act of 1973. A student seeking accommodations should contact the Director of Student Accessibility Services as early in the session as possible. In order to receive accommodations, students are required to disclose their disability to the Director by completing an [application for services](#) that can be found on the [Student Accessibility Webpage](#). In addition to the application packet, the student is required to submit supporting documentation. Submit these to the Student Accessibility Services Office either in person or by email/Fax. A brief interview, in-person, by phone or virtually, with the Director will confirm or deny the accommodations requested. The Student Accessibility Services Office will email accommodation letters to the appropriate professor, the student, and the student's advisor. Additionally, students should work cooperatively with their instructors throughout the session to make sure that their accommodations are appropriate and effective.

Upper Iowa University (UIU) provides closed captioning/transcriptions in acknowledgment of the Americans Disability Act, Rehabilitation Act, and various state laws. The information displayed is computer generated and not reviewed before being published. UIU makes no representations or warranties and expressly disclaims any responsibility or liability with respect to any errors or omissions in, or the accuracy, reliability, timeliness, or completeness of, any information that appears in a closed caption or transcript.

Contact the Director at (563) 425-5949, [accessibility@uiu.edu](mailto:accessibility@uiu.edu) or stop by the office on the 2nd floor of the Student Center, Office of Student Life, Room 229.

**Emergency Directives: (Fire, Natural Disaster, Threat on campus, etc.)**

In accordance with Upper Iowa University's emergency management plan, any student that requires assistance in the event of an emergency (Fire, natural disaster, threat on campus) is responsible for notifying their instructor of the need for assistance.

(Evacuation, and/or indoor safety protocols) This information will be held confidential and only needed in the unlikely event that there is an emergency.