

EASTERN ARIZONA COLLEGE

Systems and Procedures

Course Design
2017-2018

Course Information

Division Business
Course Number CMP 201
Title Systems and Procedures
Credits 3
Developed by James McBride
Lecture/Lab Ratio 3 Lecture/0 Lab

Transfer Status

ASU	NAU	UA
CIS 235	ISM Departmental Elective	CSC Dept Elective

Activity Course No
CIP Code 11.0100
Assessment Mode Pre/Post Test (50 Questions/100 Points)
Semester Taught Spring
GE Category None
Separate Lab No
Awareness Course No
Intensive Writing Course No

Prerequisites

CMP 100 and CMP 103 or instructor approval

Educational Value

1. Provides an introduction to information systems as the student will experience in the workplace and to prepare the student for the student's practicum.
2. Provides the instructor time to communicate with the student about human relations and the student's communications abilities.

Description

This course introduces the elements of information systems used in business organizations. Students will learn about systems development, e-business and e-commerce strategies, network and telecommunication issues, enterprise systems, ethics relating to information technology, and project and database management. Concepts will be reinforced through group participation in the form of research, hands-on activities, projects, and presentations. Students will use Microsoft Office, Microsoft Project, and other software as needed to complete individual and group projects.

Supplies

Computer with Internet access.

Flash or Cloud Storage

An Office Product such as Microsoft Office or Libre Office.

Competencies and Performance Standards

1. Describe the characteristics of the IT based organization in the digital economy.

Learning objectives

What you will learn as you master the competency:

- a. Describe the characteristics of an information system.
- b. Define MIS and list its elements.
- c. Differentiate between IS and IT.
- d. Explain how successful business professionals' use IS.
- e. List new opportunities developing for IS.
- f. Understand how to create a strong password.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner describes the characteristics of an information system
- o learner defines MIS and lists its elements
- o learner differentiates between IS and IT
- o learner explains how successful business professionals use IS
- o learner understands how to create a strong password

2. Discuss business processes, information, and information systems.

Learning objectives

What you will learn as you master the competency:

- a. Define a business process.
- b. Describe the components of a business process.
- c. Define information.
- d. Describe the role of information in business processes.
- e. Explain how information systems support business processes.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes

- by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- learner defines a business process
- learner describes the components of a business process
- learner defines information
- learner describes the role of information in business processes
- learner explains how information systems support business processes

3. Explain organizational strategy, information systems, and competitive advantage.

Learning objectives

What you will learn as you master the competency:

- Describe how organizational strategy determines an information systems' structure.
- List the five forces that determine industry structure.
- Define competitive strategy.
- Define a value chain.
- Explain how value chains determine business processes and information systems.
- Explain how information systems provide competitive advantages.

Performance Standards

Competence will be demonstrated:

- by participating in the lecture and classroom discussions
- by successful completion of required assignments, readings, and group projects
- by successful completion of chapter quizzes
- by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- learner describes how organizational strategy determines an information systems' structure
- learner lists the five forces that determine industry structure
- learner defines competitive strategy
- learner defines a value chain
- learner explains how value chains determine business processes and information systems
- learner explains how information systems provide competitive advantages

4. Describe the global economy.

Learning objectives

What you will learn as you master the competency:

- Explain the importance of the global economy today.
- Describe how global economy changes the competitive environment.
- Describe how global economy changes competitive strategy.
- Describe how the global economy changes value chains and business processes.
- Describe how the global economy changes information systems.

Performance Standards

Competence will be demonstrated:

- by participating in the lecture and classroom discussions
- by successful completion of required assignments, readings, and group projects
- by successful completion of chapter quizzes
- by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- learner explains the importance of the global economy today
- learner describes how global economy changes the competitive environment
- learner describes how global economy changes the competitive strategy
- learner describes how the global economy changes value chains and business processes
- learner describes how the global economy changes information systems

5. Summarize computer hardware and software needs as it applies to management.

Learning objectives

What you will learn as you master the competency:

- a. List the essential knowledge management needs to know about computer hardware.
- b. Differentiate between a client and a server.
- c. List the essential knowledge management needs to know about computer software.
- d. Describe policies in buying computer software and hardware.
- e. Define viruses, Trojan horses, and worms.

Performance Standards

Competence will be demonstrated:

- by participating in the lecture and classroom discussions
- by successful completion of required assignments, readings, and group projects
- by successful completion of chapter quizzes
- by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- learner lists the essential knowledge management needs to know about computer hardware
- learner differentiates between a client and a server
- learner lists the essential knowledge management needs to know about computer software
- learner describes policies in buying computer software and hardware
- learner defines viruses, Trojan horses, and worms

6. Recognize the uses of data processing within businesses and organizations.

Learning objectives

What you will learn as you master the competency:

- a. Discuss the purpose of a database.
- b. Define a database and its contents.

- c. Define a DBMS and explain its uses.
- d. Define a database application.
- e. Differentiate between an enterprise and a personal DBMS.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner discusses the purpose of a database
- o learner defines a database and its contents
- o learner defines a DBM and explains its uses
- o learner defines a database application
- o learner differentiates between an enterprise and a personal DBMS

7. Distinguish data communications technologies and their appropriate use in business.

Learning objectives

What you will learn as you master the competency:

- a. Define a computer network.
- b. Discuss the components of a LAN.
- c. Discuss alternatives for a WAN.
- d. Define encryption.
- e. Discuss the purpose of a firewall.
- f. Define VPN and discuss its importance.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner defines a computer network
- o learner discusses the components of a LAN
- o learner discusses alternatives for a WAN
- o learner defines encryption
- o learner discusses the purpose of a firewall
- o learner defines VPN and discusses its importance

8. Identify specific global communication challenges.

Learning objectives

What you will learn as you master the competency:

- a. Explain the process of localizing software.
- b. Discuss the problems and issues of localizing and distributing databases worldwide.
- c. Discuss the consequences of global data communication.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner explains the process of localizing software
- o learner discusses the problems and issues of localizing and distributing databases worldwide
- o learner discusses the consequences of global data communication

9. Discuss competitive advantage for information systems within organizations.

Learning objectives

What you will learn as you master the competency:

- a. Discuss how organizations gain a competitive advantage using the IS inside the organization.
- b. List the three fundamental types of IS within organizations.
- c. Explain how functional systems relate to the value chain.
- d. List the basic types of functional systems.
- e. List the disadvantages of functional systems.
- f. Explain how cross-functional systems relate to the value chain.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner discusses how organizations gain a competitive advantage using the IS inside the organization
- o learner lists the three fundamental types of IS within organizations
- o learner explains how functional systems relate to the value chain
- o learner lists the basic types of functional systems
- o learner lists the disadvantages of functional systems
- o learner explains how cross-functional systems relate to the value chain

10. Discuss competitive advantage for information systems across organizations.

Learning objectives

What you will learn as you master the competency:

- a. Describe how interorganizational information systems provide competitive advantages.
- b. Explain the potential conflict concerning information systems between customers and vendors.
- c. List the major categories of interorganizational systems.
- d. Describe the technology required for interorganizational IS.
- e. Explain how interorganizational information systems benefit small businesses.
- f. Explain how the increasing use of interorganizational information systems change organizational structures.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner describes how interorganizational information systems provide competitive advantages
- o learner explains the potential conflict concerning information systems between customers and vendors
- o learner lists the major categories of interorganizational systems
- o learner describes the technology required for interorganizational IS
- o learner explains how interorganizational information systems benefit small businesses
- o learner explains how the increasing use of interorganizational information systems change organizational structures

11. Discuss competitive advantage for information systems for decision making.

Learning objectives

What you will learn as you master the competency:

- a. Define an Exabyte and explain its importance.
- b. Discuss how BI systems provide competitive advantages.
- c. Discuss problems operational data pose for BI systems.
- d. List the purpose and components of a data warehouse.
- e. Define data mart and differentiate it from a data warehouse.
- f. List the characteristics of data-mining systems.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner defines an Exabyte and explains its importance
- o learner discusses how BI systems provide competitive advantages
- o learner discusses problems operational data pose for BI systems
- o learner lists the purpose and components of a data warehouse
- o learner defines data mart and differentiates it from a data warehouse
- o learner lists the characteristics of data-mining systems

12. Identify global IS elements and the value chain.

Learning objectives

What you will learn as you master the competency:

- a. Describe how global information systems benefit the value chain.
- b. Discuss how global information systems impact functional and cross-functional systems differently.
- c. Explain how global information systems affect supply chain profitability.
- d. Explain the economic impact of global manufacturing.
- e. Discuss the use of information systems as instruments for exporting cultural values.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner describes how global information systems benefit the value chain
- o learner discusses how global information systems impact functional and cross-functional systems differently
- o learner explains how global information systems affect supply chain profitability
- o learner explains the economic impact of global manufacturing
- o learner discusses the use of information systems as instruments for exporting cultural values

13. Distinguish information systems development cycle.

Learning objectives

What you will learn as you master the competency:

- a. Define systems development.
- b. Explain why systems development is difficult and risky.
- c. List the five phases of the systems development life cycle.
- d. Explain how system definition is accomplished.
- e. Explain the user's role in the requirements phase.
- f. Discuss how the five components are designed.
- g. Explain how an information system is implemented.

- h. List the tasks used for systems maintenance.
- i. List problems associated with SDLC.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner defines systems development
- o learner explains why systems development is difficult and risky
- o learner lists the five phases of the systems development life cycle
- o learner explains how system definition is accomplished
- o learner explains the user's role in the requirements phase
- o learner discusses how the five components are designed
- o learner explains how an information system is implemented
- o learner lists the tasks used for systems maintenance
- o learner lists the problems associated with SDLC

14. Describe information systems management.

Learning objectives

What you will learn as you master the competency:

- a. List the importance of the IT department.
- b. Discuss the responsibilities of the IT department.
- c. Explain how the IT department is organized.
- d. Discuss what IS-related jobs exist.
- e. Discuss organization spending on IT.
- f. Discuss your rights and responsibilities in regard to the IT department.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner lists the importance of the IT department
- o learner discusses the responsibilities of the IT department
- o learner explains how the IT department is organized
- o learner discusses what IS-related jobs exist
- o learner discusses organization spending on IT
- o learner discusses his/her rights and responsibilities in regard to the IT department

15. Discuss the importance and components of information security management.

Learning objectives

What you will learn as you master the competency:

- a. List the types of security threats and their sources.
- b. Explain the elements of a security program.
- c. Define technical safeguards and how they protect against security threats.
- d. Define data safeguards and explain how they protect against security threats.
- e. List precautions to take for disaster preparedness.
- f. Discuss organization responses in regards to security incidents.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner lists the types of security threats and their sources
- o learner explains the elements of a security program
- o learner defines technical safeguards and how they protect against security threats
- o learner defines data safeguards and explains how they protect against security threats
- o learner lists precautions to take for disaster preparedness
- o learner discusses organization responses in regards to security incidents

16. Discuss international IT development and management.

Learning objectives

What you will learn as you master the competency:

- a. List the characteristics which make international IT management challenging.
- b. List the characteristics which make international systems development difficult.
- c. Discuss the challenges of international IT management.
- d. Explain how the international dimension affects computer security risk management.
- e. Discuss the challenges that exist for investigating international computer crimes.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner lists the characteristics which make international IT management challenging
- o learner lists the characteristics which make international systems development difficult
- o learner discusses the challenges of international IT management
- o learner explains how the international dimension affects computer security risk

- o management
- o learner discusses the challenges that exist for investigating international computer crimes

17. Appraise information systems for collaboration.

Learning objectives

What you will learn as you master the competency:

- a. Define collaboration.
- b. Explain how IS is used by teams to communicate.
- c. Explain how IS is used to share resources.
- d. Explain how IS is used by teams to manage projects.
- e. Discuss how different types of IS relate to different kinds of collaboration.

Performance Standards

Competence will be demonstrated:

- o by participating in the lecture and classroom discussions
- o by successful completion of required assignments, readings, and group projects
- o by successful completion of chapter quizzes
- o by successful completion of the final exam

Criteria - Performance will be satisfactory when:

- o learner defines collaboration
- o learner explains how IS is used by teams to communicate
- o learner explains how IS is used to share resources
- o learner explains how IS is used by teams to manage projects
- o learner discusses how different types of IS relate to different kinds of collaboration

Types of Instruction

Classroom Presentation/Lecture/Demonstration

Grading Information

Grading Rationale

Projects/Homework/Attendance	70%
Quizzes/Tests	20%
Post Test (Final exam)	10%

Grading Scale

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	Less than 60%