

## GUIDED PRACTICE

Class: CIS 3010 – Introduction to Management Information Systems

Date assigned: 2 day classes of 75 minutes each or 1 night class of 150 minutes

Date due: 1 hour before class, material will become available to students 1 week prior to class; time needed to complete assignments: 100 minutes

### Overview/Introduction

What is this lesson about?

**The classes will discuss what is an information system and how is an information system developed**

### Learning Objectives

#### Basic objectives

1. List 3-5 learning objectives that you expect students to be able to master on their own before class
  - a) ***Definition of an information system***
  - b) ***Define data, information, intelligence, knowledge***
  - c) ***Know the 5 major components of an information system***
  - d) ***Know the steps in the system development life cycle***

#### Advanced objectives

1. List 3-4 learning objectives that you expect students to need help mastering in class and after class
  - a) ***Know the purpose of an information system***
  - b) ***Know the difficulties of developing an information system***
  - c) ***Know the difficulties the people of an information system pose for development and maintenance***

### Preparatory Activities and Resources:

1. Give detailed, action-oriented instructions for completing the Guided Practice assignment
  - a. Keep in mind that the activities should be minimal, simple, engaging, productive, and failure tolerant (see Talbert, 2017, pg. 135)
    - Read textbook
    - Watch videos
    - Answer assigned homework question/exercises

- b. Give a “playlist” of resources such as readings, videos, audio, or other content delivery methods that provide students the content to work with
- Read appropriate chapter of textbook – take notes
- Watch assigned videos – take notes
  - What is an information system?
  - The 5 components of an information system
  - Defining data, information, intelligence, knowledge
  - The steps in the system development life cycle
- Answer assigned short-answer questions, essay questions, scenarios/simulations – handed in at the beginning of class

2.

#### Reading Textbook

- Define an information system
- Define data, information, intelligence, knowledge
- Know the components of an information system
- Know the steps of developing an information system

#### Watch Videos

- Determine how the magnitude of electric force depends two charges and distance between two charges
- Differentiate the electric force between positive and negative charges/positive and positive charges/negative and negative charges

#### Exercises: Please complete by – 1 hour before class

- Collect homework questions/exercises at beginning of class – any content/questions that students found difficult and would like to discuss in class
- Give quiz on preclass material

#### Questions?

- Tutoring provided?
- Keeping students involved and challenged?

# Lesson Plan

**Lesson:** Information Systems - Discuss what is an information system, how is the information/information system developed

**Timeframe:** Note how long will it take the learner to complete all the activities from pre-class to post-class activities. Preclass: 100 minutes, Inclass: 150 minutes, Postclass: 30 minutes

**Materials needed:** Describe what items will be needed to complete the in-class activities.

Textbook, board, projector, computer

Students prep:

- Book: Read chapter content – take notes
- Computer/Internet: Watch assigned videos – take notes
- Computer or pen/pencil, paper: Answer homework essay questions

## Resources for learning

Start with Chalk Talk exercise – on board – what is programming?, information?, data?, cloud computing?

Have students answer

Plicker exercise – hold up cards with definitions – scan with phone – share and discuss the results on the screen – front of room

Have students put questions into a fish bowl – pick a couple out and discuss with class

Numbers exercise – 2 sides of paper - timed

Exercises:

- LOOKER exercise (at end of class)
- Break into groups, assign roles – looker, messenger, runner, drawer
- Picture - IS
- Slide - discuss different roles – what each role is responsible for

**Objectives:** List out the basic objectives tied to pre-class activities and the advanced objectives tied to in-class and post-class activities.

1. Give quiz – use notes/book - discuss – **20 minutes**
2. Define an information system
3. Describe the purpose of an information system– **20 minutes**
4. Identify the differences between data, information, intelligence, knowledge
5. Exercise – numbers – difference data/information - processing – **40 minutes**
6. Identify the 5 major components of an information system
7. State the difference between information systems and information technology
8. Determine the difficulties related to the people component of an information system, examples
9. Identify the steps in a system development life cycle
10. Differentiate between the system development life cycle and the scrum approach to develop an information system
11. Describe the difficulties of developing an information system

- 12. Identify the different stakeholders involved in the development of an information system – **30 minutes**
- 13. Describe the role of the user of an information system
- 14. Discuss examples of information systems activities/concerns/problems – do the LOOKER exercise – **40 minutes**

**Background to the Lesson:** Note the typical composition of learners in the class, how this lesson fits into the course design/schedule, prerequisite knowledge required, and typical challenges that learners face with this content area.

- Students – junior-level – completed prerequisite class – Introduction to Computers
- This class is required of all business majors – very different knowledge base and effort level of students

**Introduction to Lesson:** Describe the purpose of this content area for learners and an overview of the activities and resources for the flipped lesson.

- This class is in the first part of the class – gives background content, introduction of general knowledge that will be discussed in more detail later in term

**Procedure [Time needed, include additional steps if needed].**

**Pre-Class Individual Space Activities and Resources:** Outline the major steps for the preparatory activities and be sure to tie the steps to the basic learning objectives you have noted above. Note resources required for learner preparation.

Steps	Purpose	Estimated Time	Learning Objective
<b>Step 1:</b> Read chapter content – take notes	Background understanding of content	45 minutes	1, 2, 6, 9
<b>Step 2:</b> Watch assigned videos – take notes	Background understanding of content	30 minutes	3, 4, 7, 8, 10
<b>Step 3:</b> Answer homework essay questions	Background understanding of content	30 minutes	2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13

**In-Class Group Space Activities and Resources.** Outline the major steps for the in-class activities and be sure to tie the steps to the advanced learning objectives you have noted above. Also note any resources needed/developed to provide effective active learning activities within class.

Steps	Purpose	Estimated Time	Learning Objective
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<b>Step 1:</b> Chalk talk exercise	on board – what is programming?, information?, data?, cloud computing? Have students answer	20 minutes	2, 4
<b>Step 2:</b> Plicker exercise	hold up cards with definitions – scan with phone – share and discuss the results on the screen – front of room	20 minutes	2, 4, 7
<b>Step 3:</b> Fish bowl	Have students put questions into a fish bowl – pick a couple out and discuss with class	30 minutes	1-14
<b>Step 4:</b> Numbers exercise	2 sides of paper - timed	20 minutes	4
<b>Step 5:</b> LOOKER exercise	<ul style="list-style-type: none"> <li>• LOOKER exercise (at end of class)</li> <li>• Break into groups, assign roles – looker, messenger, runner, drawer</li> <li>• Picture - IS</li> <li>• Slide - discuss different roles – what each role is responsible for</li> </ul>	40 minutes	2, 3, 6, 7, 8, 11, 13

	<ul style="list-style-type: none"> <li>• Explain purpose of exercise</li> <li>• Hallway – show picture to looker and runner – start exercise</li> <li>• Time exercise – messenger goes back and forth relaying description to drawers</li> <li>• At end of exercise – show different groups pictures</li> <li>• Discuss purpose, what experienced, what learned, problems</li> </ul>		
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**Post-Class Individual Space Activities and Resources.** Outline the major steps for the post-class activities and be sure to tie the steps to the advanced learning objectives you have noted above. Also note any resources learners will need to complete any post-class activities assigned after the group space activities.

<b>Steps:</b>	<b>Purpose</b>	<b>Estimated Time</b>	<b>Learning Objective</b>
<b>Step 1:</b> follow up essay questions	Determine if material was learned	30 minutes	1-14

**Evaluation:**

**Analysis.** In this section, note what you think will work, and what challenges you think you may face in implementation.

- Use Prezi software to incorporate videos and exercises into lecture notes
- The nature of different knowledge-base of students – keeping the advanced students from becoming bored and keeping the limited-knowledge students from getting frustrated
- Find videos pertaining to today's technology that are entertaining

**Connections to Future Lessons.** In this section, note how you think this lesson plan connects to your next topics in the course.

- Background knowledge base for later material/content discussed
- Keeping all students caught up and on track