Syllabus

PLATO Course Principles of Information Technology, Semester A

Course Overview

This one-semester course is intended as a practical, hands-on guide to help you understand some of the principle skills of information technology required during your college education. This course has 18 lessons organized into four units, plus four Unit Activities. Each lesson contains one or more Lesson Activities.

This course will cover principle concepts, such as basic computer hardware and information system software, desktop publishing, database management system, the Internet, privacy and legality in the context of online media, and social networking in the context of professional reach.

You will submit the Unit Activity documents to your teacher, and you will grade your work in the Lesson Activities by comparing them with given sample responses. The Unit Activities (submitted to the teacher) and the Lesson Activities (self-checked) are the major components of this course. There are other assessment components, namely the mastery test questions that feature along with the lesson; the pre- and post-test questions that come at the beginning and end of the unit respectively, and an end-of-semester test. All of these tests are a combination of simple multiple-choice questions and technology enhanced (TE) questions.

Course Goals

This course will help you meet the following goals:

- Explore the basics of computer hardware and software.
- Familiarize yourself with the concepts of installing and configuring software and hardware.
- Learn about the different career opportunities in information technology.
- Learn how to use word processing software to create, format, and review documents.
- Learn how to create a desktop publishing document using basic visual design principles.
- Identify and describe various techniques of basic operations used in spreadsheets and in a database management system.
- Learn the fundamental concepts related to the Internet and the World Wide Web.
- Explore the role of emerging technologies in exchanging information.
- Familiarize yourself with privacy and legality in the context of online media and the use of professional networking for career growth.

Prerequisite Skills

PLATO Course Principles of Information Technology, Semester A has the following prerequisites:

- basic math knowledge
- ability to visualize and apply creativity and innovation
- familiarity with the writing process and following guidelines

General Skills

To participate in this course, you should be able to do the following:

- Perform basic operations on a computer.
- Perform online research using various search engines and library databases.
- Communicate through email and participate in discussion boards.

For a complete list of general skills that are required for participation in online courses, refer to the Prerequisites section of the Plato Student Orientation document, found at the beginning of this course.

Credit Value

PLATO Course Principles of Information Technology, Semester A is a 0.5-credit course.

Course Materials

- Notebook
- Computer with Internet connection and speakers or headphones
- Microsoft Word or equivalent
- Microsoft Excel or equivalent
- Microsoft PowerPoint or equivalent
- Microsoft Excel or equivalent
- Microsoft Access or equivalent

Course Pacing Guide

This course description and pacing guide is intended to help you stay on schedule with your work. Note that your course instructor may modify the schedule to meet the specific needs of your class.

Unit 1: Fundamentals of Computers and Careers

Summary

In this unit, you will learn about the basics of computer hardware and application software. You will also learn about installation and configuration of software and hardware on a computer. You will familiarize yourself with the number systems used for data representation in computers. Additionally, you will explore the career opportunities in information technology, and the training and skills required for different careers in information technology.

Day	**Activity/***Objective*	Type
1 day: 1	**Syllabus and Plato Student Orientation** *Review the Plato Student Orientation and Course Syllabus at the beginning of this course.*	Course Orientation
4 days: 2–4	**Basic Computer Hardware** *Describe and use basic computer hardware.*	Lesson
4 days: 5–8	**Introduction to Computers and Number Systems** *Discuss evolution of computers and explore number systems used for data representation.*	Lesson
4 days: 9–12	**Basic System and Application Software** *Discuss different types of software used in information systems.*	Lesson
4 days: 13–16	**Maintaining and Upgrading Computers** *Install and configure software and hardware, and describe the importance of system maintenance.*	Lesson
3 days: 17–19	**Careers in Information Technology** *Explore career opportunities in information technology.*	Lesson
3 days: 20–22	**Training and Skills** *Describe the training and skills required for different careers in information technology.*	Lesson
1 day: 23	**Space Jumble**	Game
4 days: 24–27	**Unit Activity/Threaded Discussion—Unit 1**	Unit Activity

Day	Activity/*Objective*	Type
1 day: 28	**Posttest—Unit 1**	Assessment

Unit 2: Working with Documents

Summary
In this unit, you will learn to create documents with the help of word processing software. You will also learn about various editing and formatting functions of word processing software. Additionally, you will learn how to apply visual design principles to create a desktop publishing document.

Day	Activity/*Objective*	Type
4 days: 29–32	**Creating Documents Using Word Processing Software** *Explore basic word-processing commands and formatting techniques and apply them to create a well-formatted document.*	Lesson
4 days: 33–36	**Using Word-Processing Software: Résumé Building** *Describe and apply word-formatting techniques to create a basic résumé.*	Lesson
3 days: 37–39	**Introduction to Desktop Publishing** *Describe and apply visual design principles to create a desktop publishing document.*	Lesson
1 day: 40	**ParaJumble**	Game
4 days: 41–44	**Unit Activity/Threaded Discussion—Unit 2**	Unit Activity
1 day: 45	**Posttest—Unit 2**	Assessment

Unit 3: Working with Spreadsheets, Databases, and Presentation Software

Summary
In this unit, you will learn to create and manage workbooks, and the basic operations used in spreadsheets. You will learn about the application of mathematical formulas and functions of spreadsheet programs to solve complex business-related problems. You will familiarize yourself with the basic operations in a database management system. Additionally, you will identify and apply the steps to create and deliver presentations.

Day	**Activity/***Objective*	Type
4 days: 46–49	**Creating Spreadsheets Using Spreadsheet Software** *Describe the basic operations used in spreadsheets and apply them to create a spreadsheet.*	Lesson
4 days: 50–53	**Spreadsheet Software—Using Mathematical Operations** *Describe and apply mathematical operations in a spreadsheet.*	Lesson
4 days: 54–57	**Introduction to Database Technology** *Perform basic operations in a database management system.*	Lesson
4 days: 58–61	**Introduction to Presentations** *Create and deliver presentations.*	Lesson
1 day: 62	**Space Jumble**	Game
4 days: 63–66	**Unit Activity/Threaded Discussion—Unit 3**	Unit Activity
1 day: 67	**Posttest—Unit 3**	Assessment

Unit 4: Browsing and Communicating Using the Internet

Summary
In this unit, you will familiarize yourself with the fundamental concepts related to the Internet and the World Wide Web. You will also learn how to exchange information with the help of the Internet. In addition, you will familiarize yourself with the privacy and legality issues concerning online media. Finally, you will learn the confidentiality and professional issues associated with professional networking sites.

Day	**Activity/***Objective*	Type
3 days: 68–70	**The Internet** *Describe the role of the Internet in exchanging information.*	Lesson
3 days: 71–73	**World Wide Web** *Describe the important concepts related to the World Wide Web.*	Lesson
3 days: 74–76	**Technologies for Exchanging Information** *Describe and use emerging technologies to exchange information.*	Lesson
3 days: 77–79	**Privacy and Data Security** *Explain privacy and legality in the context of online media.*	Lesson
3 days: 80–82	**Professional Networking** *Use professional networking for career growth.*	Lesson
1 day: 83	**Para Jumble**	Game
4 days: 84–87	**Unit Activity/Threaded Discussion—Unit 4**	Unit Activity
1 day: 88	**Posttest—Unit 4**	Assessment
1 day: 89	**Semester Review**	
1 day: 90	**End-of-Semester Test**	Assessment