

Syllabus

PLATO Course Computing for College and Careers, Semester B

Course Overview

This one-semester course is intended as a practical, hands-on guide to help you understand some of the advanced computer skills required during your college education or when pursuing a career. This course has 14 lessons organized into three units, plus three Unit Activities. Each lesson contains one or more Lesson Activities.

This course will cover advanced concepts, such as computer networks, complex operations in spreadsheet and database programs, and the process of creating a website.

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 different types of computer networks and their components.
- Familiarize yourself with the concepts of network architecture and types of network topologies.
- Learn about the different types of network communication technologies.
- Identify and describe various network troubleshooting techniques.
- Explore the role of cloud computing as an emerging network technology.
- Explore advanced operations in productivity applications, such as spreadsheet, database, and presentation programs.
- Familiarize yourself with the principles and process of designing a website.

Prerequisite Skills

PLATO Course Computing for College and Careers, Semester B 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 computer operations, and use word processing, spreadsheet, and presentation software.
- 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 Computing for College and Careers, Semester B 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 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: Networking Technology

Summary

In this unit, you will learn about the different types of computer networks. You will also learn about network architecture and topologies. Additionally, in this unit, you will familiarize yourself with the different types of network communication technologies as well as emerging technologies, such as cloud computing.

Day	Activity/Objective	Type
1 day: 1	Syllabus and Plato Student Orientation <i>Review the Plato Student Orientation and Course Syllabus at the beginning of this course.</i>	Course Orientation
4 days: 2–5	Introduction to Computer Networks <i>Explain the basic components and types of networks.</i>	Lesson
4 days: 6–9	Network Architecture and Topology <i>Explain the components of various network architectures and topologies.</i>	Lesson
4 days: 10–13	Network Communication <i>Identify and explain key components of network communication and troubleshooting techniques.</i>	Lesson
4 days: 14–17	Emerging Network Technology—Cloud Computing <i>Discuss cloud computing as an emerging network technology.</i>	Lesson
1 day: 18	Para Jumble	Game
7 days: 19–25	Unit Activity/Threaded Discussion—Unit 1	Unit Activity
1 day: 26	Posttest—Unit 1	Assessment

Unit 2: Advanced Productivity Applications

Summary

In this unit, you will learn about the concepts of desktop publishing and e-publishing. Additionally, you will learn how to perform advanced functions in spreadsheet, database, and presentation programs.

Day	Activity/Objective	Type
5 days: 27–31	Desktop Publishing and e-Publishing <i>Explore various techniques for publishing documents.</i>	Lesson
5 days: 32–36	Performing Summarizing and Logical Operations in Spreadsheets <i>Explore summarizing and logical operations available in spreadsheet software.</i>	Lesson
5 days: 37–41	Organizing, Filtering, and Looking Up Data in Spreadsheets <i>Explore and apply spreadsheet features related to lookup tables, sorting, and filtering.</i>	Lesson
5 days: 42–46	Advanced Database Applications <i>Explain the concept of relationships, queries, and reports in a database application.</i>	Lesson
4 days: 47–50	Delivering a Presentation Program <i>Explain the process of finalizing and delivering a presentation.</i>	Lesson
1 day: 51	Space Jumble	Game
7 days: 52–58	Unit Activity/Threaded Discussion—Unit 2	Unit Activity
1 day: 59	Posttest—Unit 2	Assessment

Unit 3: Web Design and Development

Summary

In this unit, you will familiarize yourself with the process of developing a website. You will learn about the principles of web page design, and identify the tools and languages required for designing web pages. You will also learn the role of storyboarding techniques and markup languages, such as HTML, in developing a website.

Day	Activity/Objective	Type
4 days: 60–63	Website Development Process <i>Describe the process of website development.</i>	Lesson
4 days: 64–67	Principles of Web Page Design <i>Explain the principles of web page design.</i>	Lesson
4 days: 68–71	Web Development Tools and Languages <i>Examine web development tools and languages used for developing web pages.</i>	Lesson
4 days: 72–75	Storyboarding Techniques <i>Explain the concept of storyboarding a web page.</i>	Lesson
4 days: 76–79	Creating a Web Page Using HTML <i>Examine the basic structure of a document that codes a web page, and create web pages using HTML.</i>	Lesson
1 day: 80	Thwack-A-Mole	Game
7 days: 81–87	Unit Activity/Threaded Discussion—Unit 3	Unit Activity
1 day: 88	Posttest—Unit 3	Assessment
1 day: 89	Semester Review	
1 day: 90	End-of-Semester Test	Assessment