

# Syllabus

## PLATO Course Web Technologies, Semester A

### Course Overview

This one-semester course is intended as a practical, hands-on guide to help you understand the concepts of website design. This course guides you how to create a website using web technologies. This course has 14 lessons organized into 4 units, plus 4 Unit Activities. Each lesson contains one or more Lesson Activities.

This course will cover careers in web technology, uses of web technology, and emerging trends in web technology. It also covers principles of design and creation of graphics. In addition, the course covers Internet protocols, web development tools, and client-server processing. The course also covers web page creation using HTML and style sheets. Finally, the course covers website design and the web development process.

You will submit the Unit Activity documents to your teacher, and you will grade your work on the Lesson Activities by comparing them with the 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:

- Describe different career choices in the field of web technology.
- Explore organizations that provide education, training, and certification programs in web technology.
- Discuss skills required to obtain a job and to exhibit in a job.
- Explore the effects of color and typography on a web page.
- Explore visual design principles.
- Create and edit graphics for a web page.
- Describe how information is transmitted on the Internet.
- Explore web development tools and languages used for developing web pages.
- Explore client-server processing.
- Design web pages.
- Describe the basic structure of a document that codes a web page, and create web pages using HTML.

- Create style sheets to format a web page and control its layout.
- Create a website.
- Explore the process of website development.

## Prerequisite Skills

PLATO Course Web Technologies, Semester A has a prerequisite course, PLATO Course Principles of Information Technology. Also, these fundamental skills will be helpful:

- 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 the general skills 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

Web Technologies Semester A is a 0.5-credit course.

## Course Materials

- notebook
- computer with an Internet connection and speakers or headphones
- Microsoft Word or equivalent
- Microsoft PowerPoint or equivalent
- scanner
- printer

## 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: Careers and Skills

#### Summary

In this unit, you will familiarize yourself with career opportunities available in web technology. You will learn about organizations that provide education and training to pursue a career in web technology. You will also learn about the skills required for a career in web technology.

Day	Activity/Objective	Type
1 day: 1	<b>Syllabus and Plato Student Orientation</b> <i>Review the Plato Student Orientation and Course Syllabus at the beginning of this course.</i>	Course Orientation
4 days: 2–5	<b>Careers in Web Technology</b> <i>Explore the careers in web technologies.</i>	Lesson
4 days: 6–9	<b>Training</b> <i>Research organizations that provide education, training, and certification programs in web technology.</i>	Lesson
4 days: 10–13	<b>Skills</b> <i>Describe the skills required to obtain a job and to exhibit in a job.</i>	Lesson
1 day: 14	<b>Para Jumble</b>	Game
6 days: 15–20	<b>Unit Activity/ Threaded Discussion —Unit 1</b>	Unit Activity
1 day: 21	<b>Post-test—Unit 1</b>	Assessment

## Unit 2: Principles of Design and Graphics for Web

### Summary

In this unit, you will learn how to use color and typography on a web page. You will also learn how to apply principles of design while designing a web page. Finally, you will learn how to create and manipulate graphics for a web page.

Day	Activity/Objective	Type
4 days: 22–25	<b>Color and Typography</b> <i>Explore the effects of color and typography on a web page.</i>	Lesson
4 days: 26–29	<b>Principles of Design</b> <i>Apply visual design principles.</i>	Lesson
4 days: 30–33	<b>Graphics</b> <i>Create and manipulate graphics for a web page.</i>	Lesson
1 day: 34	<b>Space Jumble</b>	Game
6 days: 35–40	<b>Unit Activity/Threaded Discussion—Unit 2</b>	Unit Activity
1 day: 41	<b>Post-test—Unit 2</b>	Assessment

## Unit 3: Web Tools and Client-side Processing

### Summary

In this unit, you will familiarize yourself with the Internet and the World Wide Web. You will also learn how information is transmitted on the Internet. In addition, you will familiarize yourself with web development tools and languages, and client-server processing.

Day	Activity/Objective	Type
4 days: 42–45	<b>Internet and World Wide Web</b> <i>Describe how information is transmitted on the Internet.</i>	Lesson
4 days: 46–49	<b>Web Design and Development Tools</b> <i>Examine web development tools and languages used for developing web pages.</i>	Lesson
4 days: 50–53	<b>Client-side Processing</b> <i>Describe client-server processing.</i>	Lesson
1 day: 54	<b>Para Jumble</b>	Game
5 days: 55–59	<b>Unit Activity/Threaded Discussion—Unit 3</b>	Unit Activity
1 day: 60	<b>Post-test—Unit 3</b>	Assessment

## Unit 4: Creating a Web Page and Website

### Summary

In this unit, you will learn how to use various design elements to design a web page. You will learn how to create a web page using HTML. You will also learn how to control web page's layout with style sheets. Additionally, you will learn about website design features. Finally, you will explore the processes involved in website development.

Day	Activity/Objective	Type
4 days: 61–64	<b>Web Page Design</b> <i>Design and create web pages.</i>	Lesson
4 days: 65–68	<b>HTML</b> <i>Examine the basic structure of a document that codes a web page, and create web pages using HTML.</i>	Lesson
4 days: 69–72	<b>Formatting with Style Sheets</b> <i>Create style sheets to format a web page and control its layout.</i>	Lesson
4 days: 73–76	<b>Website Design</b> <i>Create a website.</i>	Lesson
4 days: 77–80	<b>The Website Development Process</b> <i>Examine the process of website development.</i>	Lesson
1 day: 81	<b>Thwack-a-Mole</b>	Game
6 days: 82–87	<b>Unit Activity/Threaded Discussion—Unit 4</b>	Unit Activity
1 day: 88	<b>Post-test—Unit 4</b>	Assessment
1 day: 89	<b>Semester Review</b>	
1 day: 90	<b>End-of-Semester Test</b>	Assessment