Web Technologies, Semester A

Credits: 0.5

Course Overview and Goals

This one-semester course is intended as a practical, hands-on guide to help you understand the concepts of website design and development. This course guides you on how to create a website using web technologies. You will learn about website design principles. You will also learn how to create style sheets to format a web page.

This course has 12 lessons organized into 4 units, 4 Unit Activities and 4 discussions. Additionally, there is one Course Activity and one Course Project that you need to work on at the end of the course. Each lesson contains one or more Lesson Activities. You will grade your work in the lesson activities by comparing them with sample responses. You will submit the unit activities, course activity, and course project to your teacher for grading.

By the end of this course, you will be able to do the following:

- Describe the parts of a computer and the types of networks.
- Identify file types and extensions.
- Describe emerging technologies and virtualization.
- Create a design solution using elements and principles of design.
- Create and manipulate graphics for a web page.
- Describe the history of the internet and its impact on society.
- Describe the types of websites.
- Describe web standards and development tools.
- Describe client-server processing.
- Design and create web pages.
- Create web pages using HTML.
- Create style sheets to format a web page and control its layout.

edmentum

© 2024 Edmentum, Inc. All rights reserved.

UNIT 1: COMPUTER HARDWARE AND EMERGING TECHNOLOGIES (DAYS 1 – 21)

In this unit, you will learn about the parts of a computer. You will learn about the types of networks. You will identify file types and extensions. You will also describe various emerging technologies in the field of information technology. Additionally, you will learn about virtualization.

Lesson	Lesson Objective
Syllabus and Orientation	Review the Student Orientation and Course Syllabus at the beginning of this course.
Computer Hardware and Networks	Describe the parts of a computer and the types of networks.
Files and Folders	Identify file types and extensions.
Emerging Technologies and Virtualization	Describe emerging technologies and virtualization.

UNIT 2: DESIGN PRINCIPLES AND GRAPHICS (DAYS 22 – 41)

In this unit, you will learn about the elements and principles of design. You will learn about Gestalt concepts. You will create a design solution using elements and principles of design. You will create and manipulate graphics for a web page. You will learn about the history of the internet and WWW. You will also learn about the information protocols such as HTTP, HTTPS, and FTP.

Lesson	Lesson Objective
Principles of Design	Create a design solution using elements and principles of design.
Graphics	Create and manipulate graphics for a web page.
Internet and World Wide Web	Describe the history of the internet and its impact on society.

edmentum

© 2024 Edmentum, Inc. All rights reserved.

UNIT 3: WEB STANDARDS AND CLIENT-SIDE PROCESSING (DAYS 42 – 59)

In this unit, you will learn about the types of websites. You will identify the six main top-level domains. You will learn about web standards and development tools. You will compare various markup languages used for developing web pages. In addition, you will learn about client-server processing.

Lesson	Lesson Objective
Types of Websites	Describe the types of websites.
Web Standards and Development Tools	Describe web standards and development tools.
Client-Side Processing	Describe client-server processing.

UNIT 4: CREATING WEB PAGES (DAYS 60 – 90)

In this unit, you will learn about the components and aesthetics of web design. You will design and create web pages. You will create web pages using HTML. You will create lists, tables, and forms on a web page. In addition, you will create style sheets to format a web page and control its layout.

Lesson	Lesson Objective
Web Page Design	Design and create web pages.
HTML	Create web pages using HTML.
Style Sheets	Create style sheets to format a web page and control its layout.
Course Activity	Create a directory structure of a website and a mockup of the website's home page.
Course Project	Create a website using a website builder.

© 2024 Edmentum, Inc. All rights reserved.