Website Development 2023-2024 Catal

[ARCHIVED CATALOG]

SDEV 153 - Website Development

PREREQUISITES: Demonstrated readiness for college-level English
PROGRAM: Software Development
CREDIT HOURS MIN: 3
LECTURE HOURS MIN: 2
LAB HOURS MIN: 2
DATE OF LAST REVISION: Fall, 2020

Provides a basic understanding of the essential Web development skills and business practices that directly relate to Internet technologies used in Web site development. Students will learn to develop Web sites using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Students will work with images, hyperlinks, tables, forms, and multimedia for Web pages.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Identify and define important evolutionary changes in modern markup and style languages.
2. Define and apply essential semantic and logical elements of HTML.
3. Use CSS to apply style to a single HTML element, a single Web page, and an entire Web site.
4. Create wireframes for a variety of viewports including mobile and desktop.
5. Write valid and responsive HTML and CSS code based on a wireframe.
6. Develop Web pages and sites using current industry and W3C standards without the support of WYSIWYG software.
7. Develop Web pages and sites that meet industry requirements of accessibility set forth in ADA Section 508.
8. Develop Web pages and sites that follow the "Mobile First" and "Responsive Web Design" (RWD) approach to Web development.
9. Identify essential ethical and legal issues in developing and maintaining a Website.
10. Apply the phases of the SDLC and the principles of project management to design, develop, test, implement, and maintain a Website.
11. Use Creative Commons licensing and attributions to offer usage rights, reserve other rights, and comply with existing copyright licenses for images and multimedia elements on a Web site.
12. Apply common techniques to improve search engine rankings and enhance the marketing of a Web site.
13. Trace and explain programs in JavaScript or other client-side scripting languages encoding operators, variables, arrays, control structures, events, and functions.
14. Explain the behavior of HTTP including GET and POST.
15. Examine secure programming.

COURSE CONTENT: Topical areas of study include -

- Hyperlinks
- Tables
- Forms
- File Transfer Protocol (FTP)
- Video
- Audio
- Cascading Style Sheets (CSS)
- Hypertext Markup Language (HTML)

- Prototyping
- Creative Commons
- Systems Development Life Cycle (SDLC)
- Search Engine Optimization (SEO)
- Responsive Web Design
- Mobile First
- SSH
- Source Control
- GitHub
- ADA Compliance
- HTTP/HTTPS
- Synchronous/Asynchronous Encryption
- Input Validation
- regEx
- SQL Injection

Course Addendum - Syllabus (Click to expand)
