

CIS 273 – Web Design and Development

Course Description

This course presents students the design, implementation, and testing of Web-based applications including related software, databases, scripting techniques, interfaces and digital media. It also covers social, ethical, and security issues arising from the Web, e-Commerce and social networking software applications.

Instructional Materials

Carey, P. (2012). *New perspectives on HTML and CSS*. Boston, MA: Course Technology, Cengage Learning.

Course Learning Outcomes

1. Describe the structure of the World Wide Web as interconnected hypertext documents.
2. Describe the importance of the HTTP protocol in Web applications.
3. Create and validate HTML documents.
4. Demonstrate an understanding of XML syntax and show how to display XML in Web applications.
5. Create presentations using Cascading Style Sheets and DHTML.
6. Design interactive Web applications with an object-based client-side scripting language.
7. Distinguish among data entry and validation techniques in client-side and server-side programming.
8. Summarize client-side and server-side security issues.
9. Describe the use of server-side backend databases in Websites and Web applications.
10. Describe technologies used in Web services, including open source languages and packages, proprietary languages and packages, and enterprise Web development and distributed Web applications.
11. Compare and contrast open source and proprietary server software.
12. Explain the use of Web standards and standards bodies including the World Wide Web Consortium (W3C).
13. Summarize Web standards in terms of specifications, guidelines, software, and tools.
14. Use technology and information resources to research issues in Web design and development.
15. Write clearly and concisely about Web design and development using proper writing mechanics and technical style conventions.