BAKER COLLEGE
STUDENT LEARNING OUTCOMES

CS2010 Net-Centric Computing
3 Semester Credit Hours

Student Learning Outcomes and Enabling Objectives

1. Examine the protocols and technologies that are used in Net-Centric Computing.
    a. Review the TCP/IP protocol.
    b. Describe the Domain Name System (DNS).
    c. Explain the hypertext transfer protocol (HTTP).
    d. Explain Uniform Resource Locators (URL).
    e. Summarize the role of clients/servers in a Web 2.0 application.

2. Apply the concept of structured documents using markup languages to the design of web pages.
    a. Apply the HTML to create structured web pages.
    b. Explore the use of tables in HTML documents.
    c. Investigate the use of forms in HTML documents.

3. Apply the concept of style sheets to change the visual presentation of structured documents.
    a. Explain the structure of a Cascading Style Sheet (CSS).
    b. Use CSS to format HTML documents.

4. Explore the technologies and application of multimedia in web design.
    a. Contrast the most popular graphic formats used on the web.
    b. Compare the most popular video formats used on the web.
    c. Compare the most popular audio formats used on the web.

5. Explore the technologies of client-side scripting.
    a. Summarize the Document Object Model (DOM).
    b. Use JavaScript to validate forms.

6. Explore the technologies of server-side scripting.
    a. Use PHP to process a form.

b. Compare PHP to other server-side scripting technologies.

7. Analyze the security issues and solutions that apply to Net-Centric Computing.
    a. Explain the security issues posed by using cookies.
    b. Summarize the security issues posed by storing user credit card data.

Big Ideas and Essential Questions

Big Ideas

- Internet and World Wide Web technologies
- Structured documents
- Dynamic web-based applications
- Security of web-based applications

Essential Questions

1. How do the TCP/IP, DNS and HTTP protocol enable Net-Centric Computing?
2. How are markup languages like HTML and XML used to create structured documents?
3. How does separating structure from presentation using CSS contribute to better design?
4. How are multimedia technologies used to create modern designs?
5. How do client-side and server-side scripting combined to make dynamic Web-2.0 applications?
6. What are the security issues and liabilities that face companies deploying web applications?

These SLOs are approved for experiential credit.

Effective: Fall 2022