

BAKER COLLEGE STUDENT LEARNING OUTCOMES

WEB2010 WEB MULTIMEDIA
3 Semester Hours

Student Learning Outcomes and Enabling Objectives

- 1. Use the Document Object Model to reference, manipulate the Canvas element in JavaScript
 - a. Define how to create a reference to the Canvas object
 - b. Perform tests to determine if the browser supports Canvas
 - c. Create code to access various elements of the DOM
- 2. Explore functional code to write text, draw graphics and display images to HTML5 Canvas
 - a. Create JavaScript code utilizing the Drawing API, Text API and Image API
 - b. Explain how to clip, save and restore components onto the canvas
 - c. Describe the future technologies with Canvas
- 3. Explain how to use compositing on the Canvas
 - a. Create code to control the transparency and layer effects of objects
 - b. Describe the properties and operations for compositing
- 4. Explain how to perform transformations on the Canvas
 - a. Create code to perform rotation and translation transformations on the Canvas
 - b. Describe the properties and operations for transformations
- 5. Apply math and physics to create realistic animation.
 - a. Explain how object collision is performed
 - b. Create code to handle gravity and friction
- 6. Explain how to incorporate audio and video on the Canvas
 - a. Create code to manipulate video and audio on the Canvas.
 - b. Describe the supported data types for video and audio with their benefits and disadvantages.
- 7. Collaborate with peers to diagnosis and solve programming problems.
 - a. Troubleshoot project issues and provide potential solutions
 - b. Identify web resources such as scripts, tutorials and other resources related to the class topics.
- 8. Design and develop a web application
 - a. Create wireframes and state diagrams to show the flow of a web application.
 - b. Create a proposal document.

These SLOs are approved for experiential credit.

Effective: Fall 2017