



BAKER COLLEGE

STUDENT LEARNING OUTCOMES

WEB3350 Back-End Web Development
3 Semester Credit Hours

Student Learning Outcomes and Enabling Objectives

1. Identify the importance of, and interaction between, front-end and back-end web design.
 - a. Review front-end web design
 - b. Introduce back-end web design
 - c. Identify the relationship of front-end to back-end web design.
 - d. Differentiate between a website and a web application
2. Explore principles of back-end web development
 - a. Discuss programming, debugging, and testing
 - b. Describe the common components of a web application infrastructure
 - c. Explore security, authorization, authentication, validation, and persistence
3. Investigate APIs and Frameworks
 - a. Introduce the uses and implementation of API and frameworks
 - b. Implement or consume RESTful APIs.
 - c. Describe HTTP methods (GET, POST, PUT, PATCH, and DELETE)
4. Develop robust, secure, efficient, and scalable back-end web applications
 - a. Define requirements for a web application
 - b. Create design documentation
 - c. Investigate development tools
 - d. Produce a testing or deployment plan

Big Ideas and Essential Questions

Big Ideas

- How does back-end web development complement front-end web development?
- How does back-end development affect the design and scope of web application development?

- How do APIs and Frameworks impact the development of web applications?
- How does developing a web application that includes back-end development change the programming approach and requirements?
- Why is project management important?

Essential Questions

1. How does back-end web development complement front-end web development?
2. How does back-end development affect the design and scope of web application development?
3. How do APIs and Frameworks impact the development of web applications?
4. How does developing a web application that includes back-end development change the programming approach and requirements?
5. Why is project management important?

These SLOs are approved for experiential credit.

Effective: Spring 2025