

Course Objectives/Course Outline
Spokane Community College

Course Title: Backend Development I

Prefix and Course Number: CIS 258

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Create a backend server architecture and deploy it for public websites
- Utilize a front-end framework to access the data in the backend server
- Connect a database to the NodeJS system
- Create a page dynamically from the data and API's on the server
- Create Single Page Applications

Course Outline:

- I. Introduction to Server-Side Technologies
 - A. How browsers connect to websites through HTTP
 - B. HTTP Verbs and HTML forms (GET/POST/PUT/DELETE)
 - C. Installation of Node.js
- II. Creating simple websites with Node.js
 - A. Creating simple HTML pages
 - B. Displaying FORMS and capturing user input
 - C. Displaying data back to client
- III. Storing data in a database on the server
 - A. Creating database
 - B. Connecting to database
 - C. Saving and retrieving data from database
 - D. Displaying data back to user
- IV. Pagination of record data
- V. Uploading Pictures and storing in Database
- VI. User authentication
- VII. Protected and Public Pages