Bossier Parish Community College Master Syllabus

Course Prefix and Number: CTEC 259

Credit Hours: 3-3-0

Course Title: Server-Side Web Development

Course Prerequisites: CTEC 102 and CTEC 130

Textbook(s): Flask Web Development (2nd Edition): Miguel Grinberg. ISBN: 9781491991732

Course Description: Students will learn the fundamentals of web development using a modern back-end framework by building interactive web sites. Through the course, students will generate web pages based on database information, collect information provided via web forms and manage site access via user authentication and authorization.

Learning Outcomes:

At the end of this course, the student will:

- A. generate web pages using a modern back-end web framework
- B. define routes and deliver different content depending on URL structure
- C. build web forms and save user-submitted information
- D. dynamically build pages based on database information
- E. properly hash and store secret information

To achieve the learning outcomes, the student will or will be able to:

(The letter designations at the end of each statement refer to the learning outcome(s).)

- 1. develop web sites using a back-end framework with a modern server-side language (such as Python, PHP, Javascript or Ruby); (A)
- 2. organize code within a framework project structure; (A)
- 3. generate HTML content via a templating engine; (A, B)
- 4. read and process URL information within a web request; (B)
- 5. process information in POST and GET requests to store user information; (C)
- 6. read information from an SQL or NoSQL database to populate a web page; (D)
- 7. write information to an SQL or NoSQL database provided via web response; and (D)
- 8. hash and Salt user passwords for database storage. (E)

Course Requirements:

- To pass the course, student must achieve a course average of 70% or above.
- Students must have access to a computer (not mobile device), Microsoft Office, and the Internet to complete the assignments. Computer, software, and the Internet are available to students on campus during scheduled computer lab times and in the Learning Commons located in the BPCC Library.
- Students are required to use BPCC's LMS and are encouraged to use the BPCC Library to research topics and employment opportunities.

Course Grading Scale:

- A = 90 100
- B = 80 89
- C = 70 79
- D = 60 69
- F = 0 59

Attendance Policy:

Each student is expected to attend class regularly; excessive unexcused absences constitute grounds for suspension. Refer to the student handbook for <u>Attendance Policy</u>.

Course Fees: This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, software licenses, certification exams and/or clinical fees.

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Coordinator for SECTION 504 AND ADA Angie Cao, Student and Disability Services Specialist Disability Services, F-254 6220 East Texas Street Bossier City, LA 71111 Phone: 318-678-6511 Email: acao@bpcc.edu Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator Teri Bashara, Director of Human Resources Human Resources Office, A-105 6220 East Texas Street Bossier City, LA 71111 Phone: 318-678-6056 Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.