CSCI 315, Server-Side Web Programming
Fall 2018

Description

This course focuses on service-side Web development using current technologies. The course balances conceptual topics with practical skills for designing, implementing, and modeling Web services and data structures. Students learn key technologies and the roles they play in distributed computing. Topics include: serialization, service-side databases, and security issues.

Prerequisites

Completion of CSCI 221 with a grade of C- or better

Instructor

Anthony Leclerc, Ph.D.
Harbor Walk East, Room 324
Office Phone: 953-5963 E-mail: leclerca@cofc.edu
Office Hours

8:00 a.m. – 10:30 a.m. MWF
other times by appointment

Classroom

HWEA 300

Required Texts

Murach's PHP and MySQL, 3rd Edition, Joel Murach and Ray Harris, 2017.

Learning Outcomes

1. Introduction to Web development [Chapters 1-2]
2. Know how to work with a relational database [Chapters 3-4, 16-20]
3. Understand the MVC pattern [Chapter 5]
4. Understand how to test and debug a Web application [Chapter 6]
5. Know how to work with form data [Chapter 7]
6. Know who to code control structures [Chapter 8]
7. How to work with strings, dates, numbers, and arrays [Chapters 9-11]
8. Know how to work with cookies and sessions [Chapter 12]
9. Know how to create and use functions [Chapter 13]
10. Know how to create and use objects [Chapter 14]
11. Know how to use regular expressions, exceptions, and data validation [Chapter 15]
12. Understand and create secure Websites [Chapter 21]
13. Know how to work with files, uploads, and images [Chapter 23]

14. Develop server-side applications [throughout the course]

Development Environment

The textbook uses the NetBeans IDE along with Apache Web server, MySQL, and a PHP interpreter. All of thes can be downloaded and installed for free in a single download called XAMPP. Appendix A (Windows), Appendix B (Mac), or Appendix C (Linux) describes how to set up your computer. The computers in the department classrooms have NetBeans installed, but not the Apache Web server.

Projects, Quizzes and Tests

Due dates will be posted to Oaks and project source code *must be uploaded* to Oaks *before* the due date. Students should be prepared to present their projects in class on the due date. **NOTE: The first project will not be assigned until we have covered chapter 6**.

Take-home quizzes will be given each week covering the topics discussed from the textbook and class the previous week. These weekly quizzes will be available on Oaks. *Please check for due dates.*

Two tests will be given in this course. The first test will be around midterm time and will cover all material to that point. At the end of the semester we will have a cumulative test covering chapters 1-24 from the textbook. The tests will be similar to the quizzes except they will be closed book and taken in class.

Grading Procedure and Scale

Project Assignments	30%
Weekly Quizzes	30%
Test 1	20%
Test 2	20%

Percentage	Grade
90-100	A
87-89	A-
84-86	B+
80-83	B
77-79	B-
74-76	C+
70-73	C
67-69	C-
60-66	D
0-59	F

Course Policies

- **Portable electronic device policy:** Before entering class, turn off cellphones and pagers.
- **Attendance policy:** You are expected to attend every class. Attendance is critical to your success in this course. Some information may only be presented during class discussion.
- **Submission policy:** Assignments and quizzes must be submitted electronically using *OAKS* by the due date specified. Late assignments/quizzes will not be accepted by OAKS. Thus, make sure to submit any work you have done on an assignment by the due date.
- **Makeup policy:** *No* makeup tests will be given. If a student presents a written excuse from the *Absence Memo Office* for a missed test, then the following test score will count additionally for this missed exam. A score of zero will be recorded for any other missed test.
- **Student Honor Code:** I expect you to abide by the Honor Code and the Student Handbook: A Guide to Civil and Honorable Conduct. If you have a question about how to interpret the Honor

Code, ask before acting! I encourage collaboration, but you must document it. Thus, each student will submit their own homework and, when collaborating, provide a reference to those people and documents consulted.

- **E-mail communication:** The best way to contact me "off hours" is via e-mail (leclerca@cofc.edu). Please expect a reasonable 1-day turnaround time for any e-mail inquiries (2-days if sent just prior to or on the weekend).

  It is *very difficult* to debug an assignment with you via e-mail: turnaround times are slow and interaction cumbersome. For these reasons see me "face-to-face" for debugging help.

- **Special Needs** Any student who feels he or she may need an accommodation based on the impact of a disability should contact me individually to discuss your specific needs. Also, please contact the College of Charleston, Center for Disability Services http://disabilityservices.cofc.edu/ for additional help.