

ULSTER COUNTY COMMUNITY COLLEGE

Department of Math, Physical Sciences, Engineering, & Technology

CSC-132 S01 – Web Application Development II SPRING SEMESTER 2022

Course Information

This is an online course. Students are expected to log onto the Blackboard site regularly, watch recorded lecture videos, and complete all posted assignments by the specified due dates.

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Textbooks and Tutorials

We will be using various free online tutorials available at <u>www.w3schools.com</u> and other sites as the listed in the course outline.

The following textbooks we used last semester are also suggested but not required:

Tom Negrino, Dori Smith: *JavaScript: Visual QuickStart Guide (9th Edition)* ISBN-13: 978-0321996701 Sam Ruby, Dave Thomas *Agile Web Development with Rails 6:* ISBN: 9781680506709

Course Description

This course covers advanced web application development frameworks, languages and techniques such as Ruby on Rails, jQuery, AngularJS, PHP and Node.js or equivalent. Students work in teams to develop real-world web application projects. Topics include an overview of the Model-View-Controller (MVC) software architectural pattern and database fundamentals using MySQL or equivalent, and an overview of the concept of usability and best practices (ADA compliancy, SEO, UI and UX). Prerequisite: CSC 131 with a grade of C- or better or permission of the instructor.

Course Learning Outcomes

- Develop greater proficiency programming with JavaScript, PHP and Ruby
- Gain a greater understanding of databases and Structured Query Language
- Learn new technologies including jQuery, Bootstrap, W3.CSS, Node JS and Angular JS
- Understand and appreciate the importance of security, accessibility and usability in web design

Web Development Tools

We will be using Amazon Cloud Services Educate and Cloud9 again in this course. Free accounts will be provided at the beginning of the semester.

Grading

The final grade for the course will be determined by weighting each component of the learning assessment according to the following:

40% Web Programming Assignments

20% Midterm Exam

15% Final Project

25% Final Exam

Your letter grade for the course will be assigned following normal departmental policy:

92.5% – 100.0%	А
89.5% – 92.4%	A-
86.5% – 89.4%	B+
82.5% – 86.4%	В
79.5% – 82.4%	B-
76.5% – 79.4%	C+
72.5% – 76.4%	С
69.5% – 72.4%	C-
66.5% – 69.4%	D+
62.5% – 66.4%	D
59.5% – 62.4%	D-
0.0% – 59.4%	F

Notes:

Grades are rounded off to tenths of a percent.

SUNY Ulster does not award A+ grades.

C- and D grades are technically passing but will often not transfer to another institution.

Attendance

This online course includes lecture videos and assignments posted in the Blackboard Learning Management System. Students are responsible for logging onto the Blackboard course site frequently and checking for new information on course material, assignments and exams. This course enhances learning by extensions to the material provided in the book, augments the learning process by additional repetition, and benefits the student by participating in online discussions with other students and the Professor.

Web Programming Assignments

There will be web programming assignments throughout the semester. Assignments must be completed and submitted by the due date as listed in the Blackboard Learning System. Students are encouraged to begin their programming assignments immediately after class.

Academic Honesty

Cheating and plagiarism of any kind is not tolerated and will be punished in accordance with SUNY Ulster policy as outlined in the College Catalog.

CSC-132 OUTLINE¹

Week Ending	Wk #	Topics	Text Sections
1/28	1	Linux Overview and Commands	http://www.javatpoint.com/linux-tutorial
2/4	2	JavaScript in Depth	http://www.w3schools.com/js/
2/11	3	jQuery	http://www.w3schools.com/jquery/
2/18	4	Bootstrap and Responsive Web Development	http://www.w3schools.com/bootstrap/ http://www.w3schools.com/w3css/
2/25	5	Node.js	https://www.tutorialspoint.com/nodejs/
3/4	6	AngularJS	http://www.w3schools.com/angular/
3/11	7	Midterm Exam	
3/18	8	More PHP, Databases and SQL	http://www.w3schools.com/php/ http://www.w3schools.com/sql
4/1	9	Active Server Pages (.ASP)	https://www.w3schools.com/asp/
4/8	10	Search Engine Optimization (SEO)	https://www.tutorialspoint.com/seo/
4/15	11	Security in Web Applications	http://docs.oracle.com/javaee/6/tutorial/doc/gkbaa.html
4/22	12	Web Accessibility	https://www.w3.org/standards/webdesign/accessibility
4/29	13	Agile Software Development Methodologies	http://www.tutorialspoint.com/agile/
5/6	14	More Semantic Web Final Project Due	https://www.w3.org/standards/semanticweb/
5/19	15	Final Exam Due	