



SYLLABUS: WEB TECHNOLOGIES

COURSE & INSTRUCTOR INFORMATION

Course

Course Title, Prefix, Number, Section: Web Technologies, CITE 30363,
020 Semester and Year: Spring 20XX
Number of Credits: 3

Instructor

Final Evaluative Exercise & Important Dates

FINAL EXAM: 8AM – 10:30 AM, MAY 5, 2025

Note for students: The syllabus is your first course reading. It provides an orientation to, overview of the flow, and expectations of the course. You should turn to the syllabus for details on assignments and course policies.

Student Resources & Policy Information

Scan QR code for resources to support you as a TCU student. Please note section on [Student Access and Accommodation](#), [Academic Conduct & Course Materials Policies](#), and [Emergency Response & TCU Alert](#).



COURSE DESCRIPTION

Catalog Description

Prerequisite: COSC 30603 with C- or better. This course will provide an overview of the current full-stack web technologies. The students will learn both client-side and server-side technologies to create a functional dynamic web application. The course will include a detailed introduction to HTML, CSS, JavaScript, and HTTP followed by in-depth

coverage of server-side programming and database connectivity. Popular web frameworks will also be included. Projects will be required that demonstrate the student's understanding of these technologies.

Prerequisites & Concurrent Enrollment

Prerequisite: COSC 30603 with C- or better.

COURSE MATERIALS

Required Materials

None.

TEACHING PHILOSOPHY & METHODOLOGY

Although the World Wide Web (WWW) was initially conceived as a vehicle for delivering documents, it is now being used as a platform for sophisticated interactive applications, displacing the traditional mechanism of installable binaries. However, creating Web applications requires different approaches than traditional applications and involves the integration of numerous technologies. This course will provide an overview of the current full stack of web technologies and give you experience creating Web applications.

The students will study both client-side and server-side technologies. The course will include a detailed introduction to HTML, CSS, JavaScript followed by in-depth coverage of Java based server-side development. Popular web frameworks including Bootstrap, Vue.js, and Spring Boot will be introduced.

LEARNING OUTCOMES

Course Learning Outcomes

Students completing this course are expected to be able to

- 1) describe the general architecture of web applications
- 2) describe HTTP protocol
- 3) create web pages using HTML, CSS, and JavaScript
- 4) build dynamic database web application using Java based web technologies
- 5) deploy web applications to the cloud
- 6) be familiar with the JSON data format
- 7) understand API-First Approach to building software products
- 8) design RESTful APIs

Assignments

- Final exam.
- Quizzes.
- Homework.
- Code-Alongs: In-class programming demo code will not be provided to you directly, instead you need to type the in-class programming demos after class

and upload your code to TCU Online every week. Code-Along is a great way to learn programming, read this article first:

<https://medium.com/@ryanfleharty/conquering-the-code-along-5ebe37941f70>

Grading Philosophy & Policy

Late Assignments

Late assignment incurs a 15% penalty for each late day, including weekend and holidays. Assignments that are late more than TWO days will **NOT** be accepted (except for medical reasons).

Missed In-class Activities

If you miss, you CANNOT make it up (except for medical reasons).

Missed Exams

Make up exams will be given only for Official University Absences or absences approved in advance by the instructor. Such absences include documented medical illnesses or family emergencies.

Questions on Grading

Requests for re-evaluation of points on exams, assignments, and projects must be made to the instructor **within one week** of receiving your grade and accompanied by a brief written description of the grading error you believe was made. After this time, grades are final. Resubmission for re-evaluation subjects the entire assignment for review. This means that if an error was made in your favor, you may lose points when re-submitting.

I Do Not Accept Medical Documentation

Because it is considered an infringement on student privacy for me to have access to student medical records, I cannot accept medical documentation to justify absences. If you have a legitimate reason for your absence and want to provide verification, please access the Absence Documentation Form [here](#).

Course Assignments & Final Grade

Assignments	Percentage or Points
Final	30
Homework	10
Quiz	20
Code-Along	20
Team Project	20
Total	100

Grading Scale(s)

Grade	Score
A	90–100
B	80–89
C	70–79
D	60–69
F	0–59

COURSE SCHEDULE

This calendar represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunities. Such changes will be clearly communicated.

Week	Date	Topics	Assignments	References
1	01/13	Syllabus; HTML		https://www.w3schools.com/html/ https://developer.mozilla.org/en-US/docs/Web/HTML
2	01/20	CSS	Homework 1 assigned	https://www.w3schools.com/css/ https://developer.mozilla.org/en-US/docs/Web/CSS
3	01/27	JavaScript Basics		https://www.w3schools.com/js/
4	02/03	JavaScript Advanced and Bootstrap	Homework 1 due	https://getbootstrap.com/
5	02/10	HTTP; AJAX & JSON; API First Approach		https://www.w3schools.com/xml/ajax_intro.asp https://www.w3schools.com/js/js_json_intro.asp
6	02/17	Node.js	Team project assigned	https://nodejs.org/en/docs/
7	02/24	Vue Basics		https://vuejs.org/
8	03/03	Vue Components		https://vitejs.dev/guide/
9	03/10	Spring Boot		https://spring.io/projects/spring-boot
10	03/17	Spring Break	No classes	
11	03/24	Spring Boot cont.		
12	03/31	Vue Router		https://router.vuejs.org/
13	04/07	Vue State Management		https://pinia.vuejs.org/
14	04/14	Project		https://docs.github.com/en/actions
15	04/21	Project		
16	04/28	Project	Team Project due	
17	05/05	Final exam: 8AM – 10:30 AM, MAY 5, 2025		