

CIS 525-Section 001 and 002 Web Technology 3 Credit Hours, Fall 2023

Lectures: Tuesday, 3:00 - 5:45 PM, ELB 2392

Contact Information:

Prof. Jinhua Guo

Office Location: 211CIS E-Mail: jinhua@umich.edu

Office Hours:

Tues: 1:00 PM – 3:00 PM, in person at 211CIS or on Zoom (<u>Registration Required</u>), Thurs: 7:00 PM – 9:00 PM on Zoom (<u>Registration Required</u>), or by appointments

Course Description:

The study of technologies used to design and implement web-based applications. Topics include HTML5, CSS, JavaScript, PHP, Rich Internet Application technologies (AJAX), web servers, back-end database connectivity (MySQL), web security, multimedia, XML, JSON, and web services.

Prerequisites: previous or concurrent enrollment in CIS 375 or CIS553 or equivalent.

Program Goals/Outcomes:

https://umdearborn.edu/cecs/departments/computer-and-information-science/undergraduate-programs/bs-computer-and-information-science/educational-objectives
https://umdearborn.edu/cecs/departments/computer-and-information-science/graduate-programs/ms-computer-and-information-science

Course Objectives/Outcomes:

- An ability to assess the quality of web applications
- An ability to create and execute test cases for web applications
- An ability to create UML diagrams as part of the analysis model for a web application
- An ability to analyze a computerized solution to a real-world problem
- An ability to design a computerized solution to a real-world problem
- An ability to use software tools and specialized web development environments to implement the solution to a real-world problem

Required Materials and/or Technology:

Required Text Book

Murach's JavaScript and jQuery, by Mary Delamater and Zak Ruvalcaba. Murach's PHP and MySQL, by Joel Murach and Ray Harris.

References

Murach's HTML5 and CSS3, by Zak Ruvalcaba and Anne Boehm.



Assignment and Grading Distribution:

Mini Projects:36 %Term Project:40 %Exam:24 %

Total: 100%

Grading Scale:

[97%-100%]	A+	[83%-87%)	В	[70%-73%)	C-
[93%-97%)	A	[80%-83%)	B-	[67%-70%)	D+
[90%-93%)	A-	[77%-80%)	C+	[63%-67%)	D
[87%-90%)	B+	[73%-77%)	С	[60%-63%)	D-

Tentative Course Outline:

Date	Activity and Content
Week 1	Introduction of Web Technology
Week 2	HTML 5 and CSS
Week 3	HTML 5
Week 4	JavaScript, JSON, jQuery
Week 5	Term Project Proposal Presentation
Week 6	jQuery, AJAX
Week 7	Web servers (Apache), Backend Database Processing:
	MySQL
Week 8	PHP
Week 9	PHP sessions
Week 10	Node.js
Week 11	React
Week 12	HTTPS, Web security
Week 13	Thanksgiving recess (no class)
Week 14	Term Project Demonstration and Presentation
Week 15	Final Exam

Video and Audio Recording Policies

Course lectures may be audio/video recorded and made available to other students in this course. As part of your participation in this course, you may be recorded. If you do not wish to be recorded, please contact the instructor in the first week of class to discuss alternative arrangements.



Students may not record or distribute any class activity without written permission from the instructor, except as necessary as part of approved accommodations for students with disabilities. Any approved recordings may only be used for the student's own private use.

Course Policies

Due Dates: All assignments are due at 11:59 pm on the date specified. Programming assignments and lab reports may be turned in up to one week later, at a penalty of 3% per day. **No late homework will be accepted.** Exceptions to these rules will be made only under exceptional circumstances, and then only with an appropriate written excuse.

Grade disputes and corrections: If you are dissatisfied with a grade you receive, you need to contact me **within one week** of the date that I first attempted to return the exam or assignment results to you.

Plagiarism: Although students are encouraged to help their classmates, students sharing code are guilty of plagiarism. If programs are considered too similar, the students will be asked to explain. In all cases of cheating, students who supply code or take it will both be penalized. The assignments in this class are for student use only. You are not allowed to post any assignments on the Internet or share them with other students. Students who turn in questionable assignments or exams are subject to defend them orally to the professor without warning. The minimum penalty for all students involved in cheating is failure on the assignment.

Exams: There will be one exam. Unless prior arrangements are made, a grade of zero will be recorded for missed exams.

Food Pantry

The pantry exists to support individuals on their journey as they work toward achieving their goals. We are committed to increasing access to food as a key to success, by assisting any student in need! If you need access or have questions, please contact the Office of Student Life by phone at 313-593-5390, by email at umdearbornpantry@umich.edu.

Vaccination & Face Covering Policy

In order to protect our classes, campus, and community from COVID-19 infections, please review Dearborn's <u>COVID Response website</u> for the latest policies regarding vaccination requirements and optional masking on campus.

University-wide Policies or Statements Relevant to Courses:

Please see the 'Course Policies' Menu on Canvas for information on the following:



- University Attendance Policy
- Academic Integrity Policy
- Counseling
- Disabilities Services
- Safety Statement
- Harassment, Sexual Violence, Bias, and Discrimination