

CSCI 380 Web Programming and Interface

Summer II 2024

INSTRUCTOR INFORMATION

Instructor: Kathiravan Natarajan Office Location: Online Office Hours: Friday 9 AM to 5 PM Office Phone: N/A Office Fax: N/A University Email Address: Kathiravan.Natarajan@tamuc.edu Preferred Form of Communication: Email with the subject prefix CSCI 380 Communication Response Time: 1 day to 3 days

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required

Internet and World Wide Web how to program Author: Paul Deitel, Harvey Deitel, and Abbey Deitel Edition: 5th Published Date: July 14th 2021 ISBN: 9780137618279 Publisher: PEARSON

Course contents will be shared on the course web page. A textbook is beneficial but not mandatory.

Software Required

It will be communicated on the course web page.

Optional Texts or Materials

Course materials should suffice in achieving the educational goals of this course.

Course Description

This course offers a comprehensive introduction to web programming, covering essential technologies and frameworks. Students will start with the basics of HTML, CSS, and JavaScript (JS), with practical assignments and quizzes to reinforce learning.

Course Outline:

- 1. Introduction to Web Programming:
 - HTML, CSS, and Intro to JavaScript (JS)
- 2. Advanced JavaScript and DOM Manipulation:
 - Advanced JS concepts, DOM, and JQuery
- 3. Backend Development and Command Line:
 - o Command line commands refresher, Node.js, Express.js, EJS
- 4. Version Control and Databases:
 - Git, GitHub, and version control refresher
 - Application Programming Interfaces (API), Databases (SQL, PostgreSQL)
- 5. Authentication, Security, and Frontend Frameworks:
 - Authentication and security practices
 - Introduction to React JS

Throughout the course, students will engage in hands-on assignments and quizzes to apply and test their knowledge. The final exam will assess the comprehensive understanding of all topics covered.

Student Learning Outcomes

- Develop and structure web pages using HTML. Apply CSS to style web pages effectively.
- Write basic JavaScript (JS) to add interactivity to web pages.
- Demonstrate advanced JavaScript concepts including functions, objects, and event handling.
- Manipulate the Document Object Model (DOM) to dynamically update content and styles.
- Utilize JQuery for streamlined JavaScript programming and DOM manipulation.
- Execute basic command line commands for file navigation and operations.
- Develop server-side applications using Node.js and Express.js.
- Integrate EJS for server-side templating and dynamic content rendering.

- Utilize Git and GitHub for version control and collaborative development.
- Implement Application Programming Interfaces (APIs) to enable communication between software applications.
- Design and interact with SQL databases, particularly PostgreSQL, for data storage and retrieval.
- Implement authentication and security practices to protect web applications.
- Develop modern, dynamic user interfaces using the React JS framework.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Utilizing computers, operating systems, programming compilers, integrated development environments (IDEs), and Microsoft Word.

Instructional Methods

- 1. Course materials such as slides and video recordings of the weekly lectures will be posted in D2L.
- 2. Weekly Zoom meetings will be conducted on Fridays at 5 PM for an hour. This meeting will be utilized for clarifying additional student questions

Student Responsibilities or Tips for Success in the Course

- Since this is a short semester, students are highly encouraged to check emails and D2L updates.
- Keep up-to-date with the weekly quizzes and lab assignments
- Practice the programming syntaxes discussed in the video lectures while pausing the video
- Highly advised to take notes while watching video lectures
- Complete the homework on time
- Reach out to instruction for any questions and clarifications

GRADING

Final grades in this course will be based on the following scale:

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

Total points corresponding to the final letter grades

A = 451- 500 Points B = 401- 450 Points C = 351- 400 Points D = 301- 350 Points F = 300 & > Points

Weights of the assessments in the calculation of the final letter grade. Example:

Weekly Quizzes	40%
Assignments	40%
Final Exam	20%
TOTAL	100%

Assessments

Since this is an online course, the weekly quizzes, lab assignments, and the final exam will be conducted and assessed online. Weekly quizzes, lab assignments, and the final exam will be due at the end of the class week.

For example, if the class week starts on 07/10, the quiz and assignments should be completed on or before 07/17, at 11:59 PM. This will be followed throughout the end of the semester to avoid any conflicts in the submission deadlines.

The final exam will be available from 08/04/2024 to 08/06/2024.

Submitting and completing lab assignments and weekly quizzes on time will prevent point deductions from the final score.

Weekly quizzes:

- 1. All the quizzes are weighted equally
- 2. Will be in the format of multiple choices, multi-select, and True/False
- 3. Questions will be based on the concepts that are covered in the respective week

Assignments:

- 1. All assignments carry equal weight.
- 2. Assignments will involve writing code snippets and solving problems using programming concepts covered in class.
- 3. Individual questions within an assignment will be assigned different points based on their complexity. The point value for each question will be provided within the assignment instructions.

Final Exam:

- 1. Will be conducted in the final week of the semester
- 2. Will be in the same format as the weekly quizzes
- 3. Will cover all the topics covered throughout the semester

Late Submissions:

- 1. A week late submission will result in a deduction of 50% from your assignment score for that respective assignment
- 2. The above will be considered only under extreme conditions such as students experiencing health issues/family issues.
- 3. All other late submissions will automatically default to 0 to the respective assignment even if it is a minute late.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are the technical requirements

LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_suppo rt.htm

YouSeeU Virtual Classroom Requirements:

https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or <u>helpdesk@tamuc.edu</u>.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all coursework in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's house, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please get in touch with your instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, don't hesitate to get in touch with Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

- 1. Reach out via email with the course name as the subject line
- 2. Weekly Zoom meetings will help in interacting with the instructor
- 3. Instructor can schedule Zoom meetings with students based on the student's needs and be available to meet in person during office hours on an appointment basis.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

MAKEUP POLICY

There will be NO makeup exams/assignments in general. However, with prior notification and valid documents, makeup chances may be given to students under extreme circumstances, such as hospitalization, serious injury, death in the family, etc. No makeup allowed for other than exams and assignments.

COLLABORATION POLICY

Students are encouraged to discuss any of the assignments with each other, the instructor, or anyone else. However, any assistance must be limited to discussion of the problem and sketching general approaches to a solution. Each student must write out his or her solutions to the homework. Consulting another student's or group's solution is allowed for team research projects but prohibited for exams and quizzes. These and any other form of collaboration on assignments constitute cheating. If you have any question about whether some activity would constitute cheating, please feel free to ask.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may require the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the <u>Student Guidebook</u>. <u>http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as</u> <u>px</u>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy, please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>. http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholarly work. For more details and the definition of academic dishonesty, see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03 Undergraduate Student Academic Dishonesty Form

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDis honestyFormold.pdf

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce Velma K. Waters Library Rm 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 Email: <u>studentdisabilityservices@tamuc.edu</u> Website: <u>Office of Student Disability Resources and Services</u> <u>http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ</u> <u>ices/</u>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information, or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031 et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web URL: <u>http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf</u>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses—report violations to the University Police Department at 903-886-5868 or 9-1-1.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

Department or Accrediting Agency Required Content

COURSE OUTLINE / CALENDAR

Week	CONTENT	REFERENCE
VVEEK		NEFENENCE
	Introduction to Web Programming, HTML, CSS,	
	Intro to JavaScript (JS)	
	[Assignment 1, Quiz 1]	
W1 (07/10)		Chapters 1 – 5
	Advanced JS, DOM, JQuery	
	[Assignment 2, Quiz 2]	Chapters 6 –
W2 (07/17)	[,	10
	Command line commands refresher, Backend	10
	•	
	development, Node.js, Express.js, EJS	
		Chapter 11
	[Assignment 3, Quiz 3]	and instructor
W3 (07/24)		materials
	Git, GitHub, and Version Control refresher,	
	Application Programming Interfaces (API),	
	Databases (SQL, PostgreSQL)	
		Chapter 15
	[Assignment 4, Final Exam]	and instructor
W4 (07/31)		materials
	Authoritication and Socurity, Paget 19	
W4 (07/31)	Authentication and Security, React JS	Chapter 12
[optional]		and instructor
		materials