UNIVERSITY of WASHINGTON

TCSS460: Client/Server Programming for Internet Applications
Course outline for Summer A 2020

Course Information

Term	SLN	Section	Lectures Location	Lectures Time
Summer A 2020	14562	A	online	asynchronous

Contact Information

Name	Email	(virtual) Office Hours
Eyhab Al-Masri, PhD (instructor)	ealmasri@uw.edu	Wednesdays 11:00 AM – 12:00 PM
Deepthi Edakunni (grader)	deepthiw@uw.edu	Mondays & Fridays 11:00 AM – 11:30 AM

Course Description:
This course introduces students the fundamental concepts for developing web applications. The course also examines the languages and techniques for building client/server Internet applications. The course covers a range of web development technologies such as JavaScript, HTML5, CSS, HTTP, Node.js, among others. Other topics such as scripting technologies, queries, form handling, data access, redirection, firewall, proxies, hypermedia, cookies, and gateways will also be covered.

Course Objectives:
Upon entering this class, students should:
- Write a program in an object-oriented programming language (e.g. Java or C#).
- Have competencies associated with problem solving, algorithms and computational models.
- Understand the basic concepts and architectures of operating systems.

A student who successfully completes this course should exhibit the following skills and knowledge:
- An understanding of the basic concepts and applications of multi-tier architectures for Internet Applications.
- An ability to develop Internet applications by integrating various technologies and components for user interfaces, business logic and databases.
- An ability to compare different technologies for developing client/server applications.
- An understanding of the current and emerging client/server technologies and standards.
- An understanding of the roles and responsibilities of web developers and web designers.

Course Requirements:
Prerequisites: TCSS 360 Software Development and Quality Assurance. Knowledge of object-oriented programming and operating systems. An access to a laptop for performing in-class activities, exercises and assignments.

Course Website:
The course information/material is available via the **UW-CANVAS** system. It is important that students check regularly for course-related information and announcements under the CANVAS management system located at http://canvas.uw.edu.

Textbook and Course Material:
There is no single textbook for this course. Posted lecture slides and course material, prepared by the instructor, will mainly be covering material from the following book(s):
- **Internet and World Wide Web How To Program (5th Edition)**

Authors: Harvey Deitel, Abbey Deitel
Publisher: Pearson   Year: 2011   ISBN: 978-0132151009
- **Web Programming and Internet Technologies: An E-Commerce Approach (2nd Edition)**
  Authors Porter Scobey, Pawan Lingras
  Publisher: Jones & Bartlett Learning   Year: 2016   ISBN: 978-1284070682
- **Fundamentals of Web Development (2nd Edition)**
  Authors: Randy Connolly, Ricardo Hoar
  Publisher: Jones & Bartlett Learning   Year: 2017   ISBN: 978-0134481265

- Recorded Lectures / PowerPoint Presentations and Notes posted on Canvas management system
- **The course also requires the following hardware computing device(s):**
  - Laptop
  - Additional information on Canvas

Evaluation
The weights of the marks towards the final grade are given as follows.

Exercises	20%
(3 Programming) Assignments	35%
Quizzes	30%
Review Questions (*one per module*)	15%

- **Quizzes**: The quizzes will take from 10-25 minutes. Each quiz will be open for one day period to allow you flexibility, but once you start, you will have to complete it in the allocated time (the time requirement is specified on the page of each quiz on Canvas). The schedule of these is on the calendar section as well as below.
  - Quiz 1 on Monday **July 6** covers **Modules 1** and **2** material
  - Quiz 2 on Monday **July 20** covers **Modules 3** and **4** material
- **Review Questions**: To ensure that you keep up with the course material, there will be review questions associated with each module. The review questions will be open for a three-day period to allow you flexibility, but once you start, you will have to complete it in the allocated time (the time requirement is specified on the page of each quiz on Canvas).

There will be no makeup quizzes. If a student misses a quiz due to acceptable reasons (see University guidelines), the percentage of that quiz will be added to one of the other quizzes. Students that do not complete the course requirements by the end of the quarter will need to complete the requirements in the following term consistent with university policy. Periodically, there will be assignments/exercises assigned to give the necessary feedback as to how the students are doing in the course. Late work will not be accepted.

The UW grading system will be respected. See the UW grading information website: http://www.washington.edu/students/gencat/front/Grading_Sys.html According to the UW grading policy, the following GPAs are required in order to pass this course: Undergraduate students must earn 2.0 or greater.

Grade	GPA	Score	Grade	GPA	Score	Grade	GPA	Score	Grade	GPA	Score
A	4.0	98-100	B+	3.4	89	C+	2.4	79	D+	1.4	69
	3.9	95-97		3.3	88		2.3	78		1.3	68
A-	3.8	94		3.2	87		2.2	77		1.2	67
	3.7	93	B	3.1	86	C	2.1	76	D	1.1	66
	3.6	91		3.0	85		**2.0**	**75**		1.0	65
	3.5	90		2.9	84		1.9	74		0.9	64
			B-	2.8	83	C-	1.8	73	D-	0.8	62/63
				2.7	82		1.7	72		0.7	61
				2.6	81		1.6	71	E	0.0	<60
				2.5	80		1.5	70			

Course Schedule

To allow you flexibility, this course is a self-paced course. We will not have lectures at specific times. Each week is associated with a module consisting of 2-3 lectures. Lectures are recorded and made available on Canvas at the start of each week. You can complete reviewing the lectures anytime during the week. However, students are highly encouraged to follow the following schedule to help ensure they keep up with the pace and course material. The due dates for the deliverables are fixed.

Topics Schedule

Date	Module	Topic	Exercises	Assignments	Quizzes
Jun 22 Jun 24 Jun 25	Module 1	- lecture 1: How Web Works - lecture 2: HTML - lecture 3: CSS	Exercise 1 (due)		
Jul 29 Jul 01 Jul 03	Module 2	- lecture 4: JavaScript - lecture 5: JavaScript (cont'd) **Holiday**		A1 (due)	
Jul 06 Jul 08 Jul 10	Module 3	- lecture 6: jQuery - lecture 7: jQuery (cont'd) - lecture 8: jQuery (cont'd)	Exercise 2 (due)		**Quiz 1 (Modules 1, 2)**
Jul 13 Jul 15 Jul 17	Module 4	- lecture 9: node.js - lecture 10: node.js (cont'd) - lecture 11: node.js (cont'd)		A2 (due)	
Jul 20 Jul 22	Module 5	- lecture 12: server-side scripting - lecture 13: server-side scripting	Exercise 3 (due)	A3 (due)	**Quiz 2 (Modules 3, 4)**

* due: due date on Canvas

Contacting the Instructor
- The best option for seeing me is to attend my virtual office hours, or to schedule an appointment. I am always happy to meet with you if you have questions or concerns.
- When sending an email, please use the following format for the email subject line: "**TCSS460**: *subject of your email* "

Plagiarism & Academic Honesty: A major part of your experience at UW Tacoma will be reading, synthesizing, and using the knowledge and ideas of others. To plagiarize is to use the ideas—or unique phrasing of those ideas—without acknowledging that they originate from someone or someplace other than you. Attributing where you get your information builds your own authority to speak on that topic and provides valuable backing to the arguments you make. Attribution also distinguishes your ideas and words from those of others who came before you. At the University of Washington, plagiarism is a violation of the student conduct code, and the consequences can be serious. Though citing, quoting, and paraphrasing can be confusing at first, it is essential for your success at UWT that you familiarize yourself with these important conventions of academic writing. Additionally, plagiarism can be understood differently in various disciplines. For instance, the ways in which one summarizes others' ideas in texts, or attributes information from texts in one's own paper, are not the same in the sciences as they are in the humanities, or the social sciences. This means it is vital that you understand the specific expectations and guidelines for writing that will help you avoid plagiarizing in this class. If you have questions about what amounts to plagiarism, you are strongly encouraged to seek guidance from faculty and the Teaching and Learning Center as soon as possible. (Check www.tacoma.uw.edu/node/38211 for more information).

Classroom Civility - All classes and activities at UWT are about learning, which often involves the exchange of ideas. However, the tone and intention behind that exchange are important. Civility, politeness, reasonableness, and willingness to listen to others are expected at all times – even when passions run high. Behaviors must support learning, understanding, and scholarship.

Appeals: Except in case of error, no instructor may change a final grade that he or she has turned in to the Registrar. Grades used to meet graduation requirements cannot be changed after the degree has been granted. A student who believes he/she has a ground for an appeal should refer to http://www.tacoma.uw.edu/office-registrar/changing-or-appealing-final-grades.

Safe Campus: Preventing violence is a shared responsibility in which everyone at the UW plays apart. The SafeCampus website (www.washington.edu/safecampus/uwt/) provides information on counseling and safety resources, University policies, and violence reporting requirements help us maintain a safe personal, work and learning environment.

Electronic Devices: Electronic devices (including, but not limited to, cell phones, tablets and laptops) may only be used in the classroom with the permission of the instructor. Activities that are not relevant to the course, such as checking/ sending email, playing games and surfing the web, are considered disruptive activities when class is in session.

Incomplete: An Incomplete is given only when the student has been in attendance and has done satisfactory work until within two weeks of the end of the quarter and has furnished proof satisfactory to the instructor that the work cannot be completed because of illness or other circumstances beyond the student's control. A written statement of the reason for the giving of the Incomplete, listing the work which the student will need to do to remove it, must be filed by the instructor with the head of the department or the dean of the college in which the course is given.

Disability Resources for Students (Office of Student Success): The University of Washington Tacoma is committed to making physical facilities and instructional programs accessible to students with disabilities. Disability Resources for Students (DRS) functions as the focal point for coordination of services for students with disabilities. If you have a physical, emotional, or mental disability that "substantially limits one or more major life activities [including walking, seeing, hearing, speaking, breathing, learning and working]," and will require accommodation in this class, please contact DRS at 253-692-4508, or email at drsuwt@uw.edu for assistance.

Intellectual Property: Students should be aware that this course contains the intellectual property of their instructor, TA, and/or the University of Washington. Intellectual property includes lecture content (spoken or written), lecture handouts, questions and solutions sets, presentations and other material prepared for the course (such as PowerPoint slides). Permission from the instructor of the University is required before sharing intellectual property of completed courses. Distributing or sharing this intellectual property without expressed permission is considered a violation intellectual property rights. For this purpose, it is necessary to ask the instructor and/or the University of Washington for permission prior to uploading or sharing the intellectual property material with others (e.g. online websites).