Course Title: WEB APP DEVELOPMENT
Course #: IT-472A

Credit Hours:3
Semester: SPRING 2022
Cap:15

Faculty: SUMATHI RAGAVANANATHAM　　　　**E-mail**: sragavanantham@navajotech.edu
Office: : IT Bldg Room 116　　　　　　　　**Office Phone**: 505-786-4100
Office Hours (face-to-face or online) : Monday 1-2 pm ONLINE
Preferred Communication (email and/or text; will respond within 24 hours)

Modality (face-to-face, hybrid, or online): HYBRID
Class Location and Meeting Times (if face-to-face):(Tuesday 2:00pm to 3:20 pm)
Meeting Hours and Online Hours (if hybrid): (Thursday 2:00pm to 3:20 pm)

Required Materials:
1.Learning Web app development ,Semmy Purewal.ISBN:978-1-449-37019-0

1. David Flanagan, "JavaScript: The Definitive Guide, Sixth Edition", O'Reilly Media,2011.

2. Harvey & Paul Deitel& Associates, Harvey Deitel and Abbey Deitel, "Internet and World Wide Web - How To Program", Fifth Edition, Pearson Education, 2011

Lab Fee: None

Mission, Vision, and Philosophy
Mission: Navajo Technical University honors Diné culture and language, while educating for the future.
Vision: Navajo Technical University provides an excellent educational experience in a supportive, culturally diverse environment, enabling all community members to grow intellectually, culturally, and economically.
Philosophy: Through the teachings of Nitsáhákees (thinking), Nahátá (planning), Íína (implementing), and Siihasin (reflection), students acquire quality education in diverse fields, while preserving cultural values and gaining economic opportunities.

Course Description

This course introduces the concepts and architecture of the World Wide Web and practice markup languages. It will include higher level of HTML and CSS. Covers in details practice of embedded dynamic scripting on client-side Internet using JavaScript and jQuery and PHP.

Course Outcomes	Course Measurements
the students will be able to:	Complete reading assignments, pretests (quizzes), final exams and projects if any.
Create a basic website using HTML and Cascading Style Sheets.	
Design and implement dynamic web page with validation using JavaScript objects and by applying different event handling mechanisms	
Design and implement simple web page in PHP	
Design front end web page and connect to the back-end databases	

Connections to Program Assessment (Course-Embedded Measures)

Course Activities

Week	Date	Class Topics/Reading Due	Assignments Due	Assessments
1	01/18/2022	Introduction to WWW – WWW Architecture	Due before next class	
2	01/20/2022	Overview of HTTP, HTTP request – response — Generation of dynamic web pages	"	
	1/21/2022	**Last day to add/drop**		
3	01/25/2022	Generation of dynamic web pages	"	
4	01/27/2022	Html Svg and Canvas – Html API's - Audio & Video	"	
5	02/01/2022	Web socket API– Debugging and validating Html	"	
6	02/03/2022	Basic syntax and structure Inline Styles	"	
7	02/08/2022	Embedding Style Sheets - Linking External Style Sheets	"	
8	02/10/2022	Manipulating text	"	
9	02/15/2022	Margins and Padding - Positioning using CSS	"	
10	02/17/2022	Responsive Web Design	"	
11	02/22/2022	Introduction to JavaScript	"	
	2/25/2022	**Graduation Petition due**		
12	02/24/2022	Data types and Variables, operators		
13	03/01/2022	Properties and methods of the DOM (Document Object Model)	"	
14	03/03/2022	JavaScript arrays	"	
	03/08/2022	MidTerm Review class		
15	03/10/2022		MidTerm Exam	
	3/14-18	**SPRING BREAK**		

16	03/22/2022	Event Handling - Controlling Windows	"	
17	03/24/2022	Frames and Documents - Form validations	"	
18	03/29/2022	Object-Oriented Techniques in JavaScript	"	
19	03/31/2022	Introduction to JSON	"	
	3/31/2022	**Last day to withdraw with "W"**	"	
20	04/05/2022	JSON Structure –Introduction to jQuery	"	
21	04/07/2022	jQuery Hover Animation	"	
22	04/12/2022	jQuery Selectors	"	
23	04/14/2022	jQuery Form Validation	"	
24	04/19/2022	Introduction - How web works - Setting up the environment PHP	"	
25	04/21/2022	Introduction to AJAX	"	
26	04/26/2022	Accessing the JSON file using AJAX	"	
27	04/28/2022	Setting the VirtualBox server	"	
28	05/03/2022	Establishing connectivity with MySQL database.	"	
29	05/05/2022	Final's Review class	"	
30	05/10/2022		**Finals**	
	5/13/2022	**Graduation**		

Grading Plan
Homework: :20%
Class Participation: :5%
Project(s):   :10%
Quizzes: :10%
Mid-term: :25%
Final Exam: :25%
Portfolio: :5%

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

Grading Policy
Students must do their own work. Cheating and plagiarism are strictly forbidden. Cheating includes (but is not limited to) plagiarism, submission of work that is not one's own, submission or use of falsified data, unauthorized access to exams or assignments, use of unauthorized material during an exam, or supplying or communicating unauthorized information for assignments or exams.

Participation

Students are expected to attend and participate in all class activities. Points will be given to students who actively participate in class activities including guest speakers, field trips, laboratories, and all other classroom events.

Cell phone and headphone use

Please turn cell phones off **before** coming to class. Cell phone courtesy is essential to quality classroom learning. Headphones must be removed before coming to class.

Attendance Policy

Students are expected to attend all class sessions. A percentage of the student's grade will be based on class attendance and participation. Absence from class, regardless of the reason, does not relieve the student of responsibility to complete all course work by required deadlines. Furthermore, it is the student's responsibility to obtain notes, handouts, and any other information covered when absent from class and to arrange to make up any in-class assignments or tests if permitted by the instructor. Incomplete or missing assignments will necessarily affect the student's grades. Instructors will report excessive and/or unexplained absences to the Counseling Department for investigation and potential intervention. **Instructors may drop students from the class after three (3) absences unless prior arrangements are made with the instructor to make up work and the instructor deems any excuse acceptable.**

Study Time Outside of Class for Face-to-Face Courses

For every credit hour in class, a student is expected to spend two hours outside of class studying course materials.

Study Time for Hybrid or Blended Courses

For a hybrid or blended course of one credit hour, a student is expected to spend three hours per week studying course materials.

Study Time for Online Courses

For an online course of one credit hour, a student is expected to spend four hours per week studying course materials.

Academic Integrity

Integrity (honesty) is expected of every student in all academic work. The guiding principle of academic integrity is that a student's submitted work must be the student's own. Students who engage in academic dishonesty diminish their education and bring discredit to the University community. Avoid situations likely to compromise academic integrity such as: cheating, facilitating academic dishonesty, and plagiarism; modifying academic work to obtain additional credit in the same class unless approved in advance by the instructor, failure to observe rules of academic integrity established by the instructor. **The use of another person's ideas or work claimed as your own without acknowledging the original source is known as plagiarism and is prohibited**.

Diné Philosophy of Education

The Diné Philosophy of Education (DPE) is incorporated into every class for students to become aware of and to understand the significance of the four Diné philosophical elements, including its affiliation with the four directions, four sacred mountains, the four set of thought processes and so forth: Nitsáhákees, Nahát'á, Íína and Siih Hasin which are essential and relevant to self-identity, respect and wisdom to achieve career goals successfully.

Students with Disabilities

The Navajo Technical University and **Sumathi Ragavanantham , Assistant Professor, Schoolof Engineering, Math and Technology** are committed to serving all enrolled students in a non-discriminatory and accommodating manner. Any student who feels he/she may need an accommodation based on the impact of disability or needs special accommodations should inform NTU in accordance with the procedures of the subsection entitled "Students with Disabilities" under Section 7: Student Support Programs, NTU Student Handbook.

Email Address

Students are required to use NTU's email address for all communications with faculty and staff.

Final Exam Date: May 10th 2022