

Dillard College of Business Administration
SYLLABUS: Web Application Development
MIS 4113, Section 201 and Section Z20
Spring Semester of 2024
TR 9:30 am-10:50 am

DB 324

Contact Information

Instructor: Dr. Grace Zhang, Professor of Management Information Systems
Office Hour: DB 273, MW 9:30 -11:30 am, TR 11:00 am -12:00 pm, or by appointments
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Course Materials

- Fundamentals of Web Development, 2nd edition, ISBN 9780134481265, by Connolly and Hoar. You can obtain either paper or digital versions of the textbook.
- Companion website of the textbook for lab exercises. Instructions are also provided in D2L.
- Lecture notes and other materials will be provided in class and on D2L. D2L access to Course Content, Assessments, Assignments, Grades, Mail, Announcement, and so on. I will use D2L as the primary communication channel for the class.
- Website access to [W3Schools](#) and [Codecademy](#) for free learning resources.
- [VS Code](#) is the primary tool to do scripting. It is free and available in Dillard computer labs.
- Zoom students can access the class via the link (<https://msutexas-edu.zoom.us/j/99126054087>). Please remain webcam on during the class sessions for questions and answers.

Course Description

An extended introduction to dynamic web application design, including advanced programming logic and implementation using the server-side scripting language. The course will provide instruction in the advanced manipulation of data and the programming of sophisticated data-intensive applications. In this course, emphasis will be placed on developing web-based business applications. Major topics covered include interface design, database access, web service concepts, and programming management.

Course Prerequisite(s)

MIS 3003 or concurrent enrollment

Learning Goals

General Learning Goals:

- **Problem Solving and Decision Making.** External online learning units, lab exercises, and chapter projects from the textbook will be assigned. These assessments require students to utilize web programming techniques, gather

relevant formation, and practice related web developments. These graded assessments are a portion of the overall course grade.

- **Technology Utilization.** Extensive use of technology is throughout the course. Web application-related technology (HTML, CSS, JavaScript) will be the primary coverage. Students will also demonstrate their ability to use typical business computer applications by utilizing Microsoft applications.

These general learning goals are among those established by the Dillard College of Business Administration. General learning goals represent the skills that graduates will carry with them into their careers. While assessing student performance in obtaining these general learning goals, Dillard College is assessing its programs. The assessments will assist us as we improve our curriculum and curriculum delivery.

Course-Specific Learning Goals:

After completing this course, students should be able to:

- Understand how a web page is retrieved and interpreted
- Fluent in basic HTML syntaxes such as tag and a variety of essential attributes for each tag element
- Understand why the semantic structure is essential for HTML5
- Fluent in basic CSS syntaxes such as selector, property, and value
- Describe where the CSS styles can be located, and the different purposes of these locations
- Fluent in basic HTML table syntax, including the variety of tags involved
- Fluent in basic HTML form syntax, including the essential attributes for <form> element
- Understand the concept of responsive web design and master the approaches to implementing the responsive web design
- Comprehend the DOM object concepts, including nodes, properties, and events. Able to use JavaScript to interact and modify DOM objects.
- Able to use JavaScript to handle/listen to DOM events (mouse, keyboard, form, and frame events).
- Perform pre-validation for forms using JavaScript, such as for required fields, number validation, and so on.
- Fluent in the use of JavaScript frameworks (such as jQuery and some React)
- Understand the concept of server-side scripting/development (such as Node.js)
- Know the popular server-side development technologies
- Understand the role of using database content in web development

Course Policies

Attendance Policy: Regular attendance is expected, and a roll will be taken. Upon a student's 5th unauthorized absence, that student will be dropped for nonattendance and receive a grade of WF for the course. See the MSU Student Handbook for University Class Attendance Policy.

Missed Examination, Quiz, and In-class Exercises Policy: Only students with authorized absences (see University Class Attendance Policy) may make up missed examinations and quizzes (announced and unannounced) assignments. **Written verification is mandatory for late or missing work.** In all cases, the instructor must be contacted by the day of the scheduled exam, or no makeup will be allowed. A deduction may be assessed for a late exam at the instructor's discretion.

Grading and Evaluation

Students' performance will be assessed using the following elements.

1. **Exams:** Each exam will consist of multiple-choice or true/false questions, some short answers, or programming codes. Exams will cover assigned chapters, lab exercises, external online learning units, and chapter projects. Students are responsible for all posted materials, even if it is not directly discussed in class. The exam will also be auto-submitted once time runs out.
2. **Chapter Projects:** There will be a mini project related to each chapter for several course chapters. Please complete the project on time and submit it to the D2L Dropbox.
3. **Lab Exercises:** The textbook includes lab exercises to match the course content. Lab exercise has step-by-step instructions.
4. **External Learning Units:** You need to sign up or log in to [Codecademy](#) websites. We plan to cover learning units of HTML, CSS, JavaScript, and React (optional) this semester. Each of the learning units takes hours of study. This is a semester-long work to enhance your basic understanding of the web app environment, so pace yourself and work on the tutorials daily. Some lessons are easier than others, but others can be difficult. You are highly encouraged to explore other free learning units.
5. **Attendance and Participation:** Absences will be excused only for approved school trips and severe health issues. Class participation in all formats (questions, answers, comments, and feedback) is highly encouraged to achieve a good participation grade. If you need to Zoom into a class session for specific reasons, please contact the instructor in advance. Zoom Meeting access with **both webcam and microphone ready if you are joining the class remotely. A clear video of you is required for remote attendance records.**

Grades will be allocated using the following scheme.

Element	Weight	Letter Grade	Numeric Grade
Exams	40%	A	90-100
External Learning - Codecademy	10%	B	80-89
Chapter Projects	20%	C	70-79
Lab Exercises	20%	D	60-69
Attendance & Participation	10%	F	<= 59
Total	100%		

Academic Integrity

Students are referred to as the "Student Honor Creed" of the Midwestern State University Undergraduate Catalog regarding academic honesty. Academic dishonesty (cheating, collusion, and plagiarism) is taken seriously and dealt with according to the formal procedures. The minimum penalty is an "F" in this course and a referral to the Dean of Students for disciplinary action, which may result in expulsion from the University. All work is expected to be done individually unless stated otherwise. Sharing computer files to assist another student is considered a violation of academic integrity for BOTH students.

Americans with Disabilities Act

Suppose a student has an established disability as defined in the Americans with Disabilities Act and would like to request accommodation. In that case, that student should contact the instructor as soon as possible (i.e., within the first two weeks of the semester). This class follows the guidelines suggested by the Center for Counseling and Disabilities Services for those students who qualify for disability services. Please refer to the details in the Midwestern State University Undergraduate Catalog.

Campus Carry

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked following state law. For more information regarding campus carry, please refer to the University's webpage at Campus Carry Policies. If you have questions or concerns, please contact MSU Police Department.

Midterm Progress Report

To help students keep track of their progress toward course objectives, I might provide a "Midterm Progress Report" through the student's WebWorld account. The reported grade will be ONLY for at-risk students identified around the Midterm. The midterm grades will not be reported on the student's transcript or calculated in the cumulative GPA. They simply give students an idea of where they stand at the semester's midpoint. Students earning below a C at the midway point should schedule a meeting with the professor to plan for improvement during the rest of the semester.

Syllabus Change Policy

This syllabus is a guide for the course and is subject to change. It is not a contract. Syllabus changes will be communicated by notification in D2L and may or may not result in document changes. The student's sole responsibility is to find out if anything affecting the course requirements has changed. Please check D2L and related emails regularly!

Tentative Schedule

Week	Date	Day	Chapter	Topic	Due
1	16-Jan	T	1	Introduction to Web Development	Syllabus, Codecademy Sign Up
	18-Jan	R	2	How the Web Works	
2	23-Jan	T		Chapter 2 Lab	Chapter 2 Lab
	25-Jan	R	3	Introduction to HTML	
3	30-Jan	T		Chapter 3 Lab	Chapter 3 Lab
	1-Feb	R		Chapter 3 Project	Chapter 3 Project
4	6-Feb	T	4	Introduction to CSS	
	8-Feb	R		Chapter 4 Lab	Chapter 4 Lab
5	13-Feb	T		Chapter 4 Project	Chapter 4 Project
	15-Feb	R		Exam 1 Chapter 1-4	Codecademy Learn HTML
6	20-Feb	T	5	HTML Tables and Forms	
	22-Feb	R		Chapter 5 Lab	Chapter 5 Lab
7	27-Feb	T		Chapter 5 Project	Chapter 5 Project
	29-Feb	R	7	Advanced CSS	
8	5-Mar	T		Chapter 7 Lab	Chapter 7 Lab
	7-Mar	R		Bootstrap Extra & Responsive Design	Bootstrap Extra and Responsive Design
9	12-Mar	T		No Class, Spring Break	
	14-Mar	R			
10	19-Mar	T	8	JavaScript 1: Language Fundamental	
	21-Mar	R		Chapter 8 Lab	Chapter 8 Lab
11	26-Mar	T		Chapter 8 Project	Chapter 8 Project
	28-Mar	R		No Class, Holiday Break	
12	2-Apr	T		Exam 2 Chapter 5, 7, 8	Codecademy Learn CSS
	4-Apr	R	9	JavaScript 2: Using JavaScript	
13	9-Apr	T		Chapter 9 Lab	Chapter 9 Lab
	11-Apr	R		No Class, Self Study Day	Chapter 9 Project - Start
14	16-Apr	T		Chapter 9 Project	Chapter 9 Project - Finish
	18-Apr	R	10	JavaScript 3: jQuery	
15	23-Apr	T		Chapter 10 Lab	Chapter 10 Lab
	25-Apr	R		Chapter 10 Project	Chapter 10 Project
16	30-Apr	T	20	JavaScript Frameworks	
	2-May	R		JavaScript Frameworks	Codecademy Learn JavaScript
Final	7-May	T	8:30-10:00	Exam 3 Chapter 9, 10, 20	