



NORTHWEST
MISSOURI STATE UNIVERSITY
MARYVILLE | KANSAS CITY

School of Computer Science and Information Systems
44-563-03 Web Apps and Services (3 hours)
Spring 2026

Instructor: Dr. Charles Hoot
Phone: 660-562-1801
Section 3 MWF 2:00-2:50 CH1150

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Office Hrs:

MWF 1:00-2:00pm
TT 1:00-3:00pm

TA:

Himaja Kaishetty s575197@nwmissouri.edu

Prerequisites: A minimum grade of C in CS44141 and in any of the following: MATH 17117 or MATH 17118 or MATH 17120.

Textbook (required): There is no formal text book, but you will be required to use formal documentation on websites and other on-line sources.

Course description: Technologies and protocols supporting web applications and web services. Students gain experience in client-side and server-side programming. The objective of this course is to introduce students to the concepts and tools for building interactive web-based applications and services.

Student learning outcomes:

Upon completion of this course, each student should be able to:

1. Use GIT for version control
2. Create static web pages using HTML/CSS
3. Use responsive design
4. Understand the difference between client side and server side
5. Use JavaScript for client side computation.
6. Use Node/Express
7. Understand MVC
8. Create object models
9. Use CRUD operations with a RESTful service.
10. Authenticate users
11. Create and host a web based app

Assessment methods: Desired Student outcomes will be assessed via quizzes, midterms, and a final exam.

Instructional methods: Instructional methods include lectures, individual work, and quizzes.

Graded course requirements:

Category	Weight
Homework	30%
Quizzes	5%
Midterm Exams 2	40%
Final	20%
Attendance/Participation	5%
Total	100%

Grading scale:

Undergraduate Credit	
Percent Range	Grade
90-100%	A
>= 80% and < 90%	B
>= 70% and < 80%	C
>= 60% and < 70%	D
below 60%	F

Course outline/major topics studied:

This is a tentative schedule and is subject to change. For exact information, including important dates, check the course website.

Tentative Spring 2024 Schedule

	MON	WED	FRI
Week 1 – Jan 12	Introduction/GIT	GIT	Lab time Lab 1 due (End of Lab)
Week 2 – Jan 19	MLK day No class	Markdown Assignment 1 (Git)	Lab time Lab 2 due (End of Lab)
Week 3 – Jan 26	History/HTML	HTML Assignment 2 (MD) due (EOD)	Lab time Lab 3 due (End of Lab)
Week 4 – Feb 2	HTML/CSS	CSS/Selector Assignment 3 (HTML) due (EOD)	Lab time Lab 4 due (End of Lab)
Week 5 – Feb 9	Responsive Design/Flex	Bootstrap Material Design Assignment 4 (CSS) due (EOD)	Lab time Lab 5 due (End of Lab)
Week 6 – Feb 16	Responsive Design/	Java Script Basics Assignment 5 (Flex/Bootstrap) due (EOD)	Midterm 1 – Friday February 20, in class Lab 6 due (End of Day)
Week 7 – Feb 23	Java Script	Java Script Assignment 6 (JS/DOM) due (EOD)	Lab time Lab 7 due (End of Lab)
Week 8 – Mar 2	Spring Break No class	Spring Break No class	Spring Break No class
Week 9 – Mar 9	Async/Promises Fetch/Axios	JSON, NodeJS Assignment 7 (JS/Callbacks/Arrays) due (EOD)	Lab time Lab 8 due (End of Lab)
Week 10 – Mar 16	Express	Hosting Assignment 8 (NodeJS) due (EOD)	Lab time Lab 9 due (End of Lab)
Week 11 – Mar 23	MVC ORMs	View Engines Assignment 9 (Express/Render) due (EOD)	Lab time Lab 10 due (End of Lab)
Week 12 – Mar 30	PUG	Mongo/Atlas Assignment 10 (PUG) due (EOD)	Midterm 2 – Friday April 4, in class Lab 11 due (End of Day)
Week 13 – Apr 6	Mongo/Atlas Restful Services	Restful Services Assignment 11 (Mongo) due (EOD)	Lab 12 due (End of Lab)

Week 14 – Apr 13	Security	Security/Media Assignment 12 (RESTful API) due (EOD)	Lab time Lab 13 due (End of Lab)
Week 15 – Apr 20	User Interface	User Interface Assignment 13 (Authentication) due (EOD)	<u>Final Part 1 – Friday April 24, in class</u>
Week 16 – Apr 27 Finals Week	Final Part 2: Monday April 27 2:30-4:30 pm		

Note: Course schedule is subject to change with instructor notification and students will be responsible for abiding by these changes.

Academic Calendar: <http://www.nwmissouri.edu/academics/calendar.htm>

Final Exam Schedule: <http://www.nwmissouri.edu/registrar/finals.htm>

Programming Assignments

Assignments will be released on Wednesday and come in two parts. A portion of the assignment (the lab portion) will be due and submitted electronically on Canvas before the end of the lab period on Friday. The Friday class period will be in class and the instructor and GAs will be available to provide consultations. *Late lab submissions will not be accepted.* If you submit the lab portion before the start of class, you will be marked in attendance automatically.

On a few Fridays, I may not be on campus or we will have an exam. On those days, the lab will be due at the end of day Friday.

The remainder of the assignment will be due on Wednesday at 11:59pm. These assignments can be submitted late up to 24 hours, but will be assessed a penalty of 10% of the maximum possible score on the assignment. Any work submitted after the late period will receive **NO** credit.

Quizzes/Exams

Quizzes will be announced the day before and you will have 24 hours to complete them through the Canvas Website. At the end of the quiz time, submissions will be closed and late submissions will not be accepted. You will be allowed to take the quiz multiple times retaining the best score.

The midterms and final will be held on the dates specified. If you must miss an exam, it is your responsibility to notify the instructor in person prior to the exam and to provide the instructor with written verification of the reason for your absence. Failure to follow these instructions may result in a grade of zero on the exam.

The two midterm exams will be held in class February 20 and April 4. They will be paper based exams and will last for 50 minutes.

The first portion of final exam will be held on Friday April 24 starting at 6pm. It will be paper based and will last for 50 minutes. The second portion of the final will be held during the scheduled time during finals week.

All exams are open for one ***personally hand written*** page (**one side** of one standard 8 ½ by 11 inch sheet of paper). Electronic resources are **not** allowed.

Attendance

You are expected to attend class each day AND BE ON TIME. Attendance will be a factor in your grade. If you must miss class due to a university sponsored event (documented with an excuse signed by the university sponsor prior to the event) or by circumstances considered extenuating by the course instructor, it is your responsibility to inform the instructor class time via email. If the instructor was not notified before class time, the absence will be unexcused. Please refer to the general university policy on attendance at <https://www.nwmissouri.edu/policies/academics/Attendance.pdf>

Classroom Decorum

Students are required to come to class prepared for the day's activities. That means be in your seat before the class starts, with the textbook, notepaper or notebook and writing instrument. We will start class promptly at the designated time.

Cell phones and pagers must be turned off during class time and are not allowed during exams. Laptop computers and handhelds may be used during class time if they are being used for a class activity, such as taking notes. Students are not to read or send e-mails, text messages, or surf the web during class time. Anyone using an electronic device to give or receive assistance during exams will be in violation of the "Academic Integrity" section of the catalog.

Refer to Syllabus Addendum for additional information.