



NORTHWEST

MISSOURI STATE UNIVERSITY

MARYVILLE | KANSAS CITY

School of Computer Science and Information Systems

44-563-02/03 Web Apps and Services (3 hours)

Spring 2023

Instructor: Dr. Charles Hoot

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Phone: 660-562-1801

Office: Colden Hall 2163

Section 1 MWF 2:00-2:50 Valk111

Section 2 MWF 11:00-11:50 CH3500

Section 3 MWF 12:00-12:50 CH3650

Office Hrs:

MW 3:00-5:00

TTh 9:30-11:00

GAs: Kommineni, Nithish S549045@nwmissouri.edu

Mallela, Gautam S555619@nwmissouri.edu

Medikonda, Jaya S556452@nwmissouri.edu

Nuli, Swathi S555089@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: 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 2023 Schedule

	MON	WED	FRI
Week 1 – Jan 9		Introduction	GIT
Week 2 – Jan 16	MLK No class	VSCode/GitBash/GitHub	Lab time Lab 1 due (End of Lab)
Week 3 – Jan 23	Markdown	History Assignment 1 (Git) due (EOD)	Lab time Lab 2 due (End of Lab)
Week 4 – Jan 30	HTML	HTML Assignment 2 (MD) due (EOD)	Lab time Lab 3 due (End of Lab)
Week 5 – Feb 6	CSS	CSS/Selector Assignment 3 (HTML) due (EOD)	Lab time Lab 4 due (End of Lab)
Week 6 – Feb 13	Responsive Design/Flex	Responsive Design/Bootstrap	Lab time

		Material Design Assignment 4 (CSS) due (EOD)	Lab 5 due (End of Lab)
		<u>Midterm 1 – Thursday</u> <u>February 16, 6pm</u>	
Week 7 – Feb 20	Java Script Basics	Java Script Assignment 5 (Flex/Bootstrap) due (EOD)	Lab time Lab 6 due (End of Lab) PAT
Week 8 – Feb 27	Java Script	Async/Promises Fetch/Axios Assignment 6 (JS/DOM) due (EOD)	Lab time Lab 7 due (End of Lab)
Week 9 – Mar 6	Spring Break – No class	Spring Break – No class	Spring Break – No class
Week 10 – Mar 13	JSON, NodeJS	Express Assignment 7 (JS/Callbacks/Arrays) due (EOD)	Lab time Lab 8 due (End of Lab)
Week 11 – Mar 20	Hosting, Heroku	MVC ORMs Assignment 8 (NodeJS) due (EOD)	Lab time Lab 9 due (End of Lab)
Week 12 – Mar 27	View Engines	PUG Assignment 9 (Express/Heroku) due (EOD)	Lab 10 due (End of Lab)
Week 13 – Apr 3	Backend DB	Mongo/Atlas Assignment 10 (PUG) due (EOD)	Lab time Lab 11 due (End of Lab)
		<u>Midterm 2 – Thursday</u> <u>April 6, 6pm</u>	
Week 14 – Apr 10	RESTful Services	RESTful Services Assignment 11 (Mongo) due (EOD)	Lab time Lab 12 due (End of Lab)
Week 15 – Apr 17	Security/Media	Testing/Deployment Assignment 12 (RESTful API) due (EOD)	Lab time Lab 13 due (End of Lab)
Week 16 – Apr 24	Design	Design	

		Assignment 13 (Authentication) due (EOD)	
		<u>Final Part 1 – Thursday April 27, 6pm</u>	
Week 17 – May 1 Finals Week	Final Part 2 Section 1: Friday, May 5 7:30 am - 9:30 am Section 2: Wednesday, May 3 2:00 pm - 4:00 pm Section 3: Thursday, May 4 7:30 am - 9:30 am		

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 at the end of the lab period on Friday. The Friday class period will be online and the instructor and GAs will be available to provide consultation. **Late lab submissions will not be accepted.**

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 midterm exams will be held in the evening starting at 6pm/7pm on **Thursday** evenings September 22 and November 3. They will be paper based exams and will last for 50 minutes.

The first portion of final exam will be held in **Thursday** evening December 1 starting at 6pm/7pm. 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. Check out the time and date for your particular section.

(The location and exact time of the evening exams is not yet finalized. We may need to have two groups, one group starting at 6pm and the other starting at 7pm. We will make an announcement finalizing the details in a couple weeks.)

Finalized Timings

6pm to 6:50pm

Sections/Rooms

7pm to 7:50pm

Sections/Rooms

To Be finalized

All exams are open for one **personally hand written** page (**one side** of one standard 8 ½ by 11 in sheet of paper) but 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.

Northwest Online Tools

Course materials are distributed through the course website at Northwest Online. To access the site, go to <http://www.nwmissouri.edu/online/>. Click the link for Technical Support to see the basic technical requirements your computer system must satisfy. Use the links to configure and test your devices.

Accessing Course Materials

To access course materials go to the Northwest Online site and log in. Your login ID is your Northwest Student Number (S-----). Your password is your social security number, or your 919 number, without dashes. If you are a returning online student, your password will be the same as last trimester. During the first week of classes, *all* students are required to visit the site, check that their computer system meets the technical requirements, and complete the Student Orientation Course, which shows how Northwest Online operates.

Announcements and email

Announcements are communicated via the **Announcements** page on the course website and your Northwest Missouri State University email account. It is your responsibility to check each of these sources daily. Note that you must use your Northwest e-mail account on the Northwest Online site. For security reasons, emails without an appropriate subject may not be opened. Emails *must* include a useful signature; unsigned emails may not receive a reply.

Northwest Online Helpdesk. for Canvas and eConferencing Software

Hours: 24/7/365

helpdesk@northwestonline.org

☎ 877.740.2213

NWMSU Helpdesk. for General Questions on Campus Computer, Software, and Networking

Hours: Monday-Thursday 8-9; Friday 8-5 helpdesk@nwmissouri.edu

☎ 660.562.1634

Final exams: If an emergency occurs that prevents the administration of a course scheduled final examination, the final course grades will be calculated based on the work in the course completed to that point in time and the faculty member's considered judgment. Final exams will not be rescheduled, and a grade of "I" will not be given as a result of an institutional cancellation of a final examination. This final exam policy does not apply to online courses.

Wellness: Northwest focuses on student success—every student, every day.

The Wellness Center, 660.562.1348, offers free counseling for students coping with depression, anxiety, alcohol or drug misuse, relationships, and other emotional, social, and academic stressors. In addition, faculty, staff, and students who are concerned with student wellbeing can report their concerns, including anonymously, to the Behavioral Intervention Team, so that the student can be offered relevant support, at this link: [Concerning Behavior Reporting Form](#). If you are concerned about the immediate safety of a student, please call the University Police, who have specialized training in intervention, at 660.562.1254.

The wellness center website has links to a lot of resources (both human and on-line) that you might find of use. Check it out at: <https://www.nwmissouri.edu/wellness/index.htm>

Academic Administrative withdrawal: When it is in the best interest of Northwest Missouri State University for a student to withdraw, a student will be given a W, put on administrative hold, and given notice that they are about to be withdrawn. This action will result in removal of all credits associated with courses that have yet to be completed in the semester in question and the student will be administratively withdrawn from the University. An Administrative Withdrawal does not affect the student's grade point average. Please refer to Northwest Missouri State University's Academic Administrative Withdrawal Policy at: <https://www.nwmissouri.edu/policies/academics/Adding-Dropping-Withdrawals.pdf>

University communications: Students are expected to use their Northwest student email account for any electronic correspondence within the university. Students are also strongly advised to check their email and CatPAWS accounts on a regular basis.

Academic integrity policy: The students, faculty, and staff at Northwest endeavor to sustain an environment that values honesty in academic work, that acknowledges the authorized aid provided by and intellectual contributions of others, and that enables equitable student evaluation. Please refer to Northwest Missouri State University's Academic Integrity Policy at <http://www.nwmissouri.edu/policies/academics/Academic-Integrity.pdf>

Learning or Living Accommodations Request Process: Northwest Missouri State University complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 [ADA] and the ADA Amendments Act of 2008 [ADAAA]. If a student has a documented disability that qualifies under the ADA/ADAAA and requests accommodations, they should review the Accessibility and Accommodations webpage at <https://www.nwmissouri.edu/titleixequity/accessibility/index.htm> for guidance, including the accommodations application and supporting documentation requirements. Contact ada@nwmissouri.edu or 660.562.1873 for further assistance. For the university policy on disability accommodation refer to <http://www.nwmissouri.edu/policies/student/Disability-Accommodation.pdf>

Non-discrimination and anti-harassment policy: Northwest Missouri State University is committed to maintaining an environment for all faculty, staff, students, and third parties that is free of illegal discrimination and harassment. Please refer to the Non-Discrimination and Anti-Harassment Policy at <http://www.nwmissouri.edu/diversity/titlevi.htm>

Family Education Rights and Privacy Act (FERPA) policy: Family Educational Rights and Privacy Act of 1974, as amended (commonly known as the Buckley Amendment), is a federal law which provides that colleges and universities will maintain the confidentiality of student education records. Please refer to the Family Educational Rights and Privacy Act (FERPA) Policy at <http://www.nwmissouri.edu/policies/academics/Family-Educational-Rights-and-Privacy-Act.pdf>

Disclaimer: Course schedule is subject to change and you will be responsible for abiding by any such changes. Your instructor will notify you of any changes.