



CIT 438 – Web Systems Development II Course Syllabus – Fall 2025

Faculty

Jeffrey Myers II, M.S.

Course Description

Emerging trends in web-based applications and how they are developed. Emphasis on building business-oriented solutions using web technologies and the Internet.

Credit Hours: 3

Prerequisite: CIT 436

Objectives and Learning Outcomes

The course's main objective is to learn to:

- Explore the use of JavaScript for server-side development using technologies like Node.js.
- Understand the versatility of JavaScript in both front-end and back-end contexts.
- Master the Document Object Model (DOM) and its manipulation.
- Implement dynamic server content updates and reflect changes in the client.
- Programmatically connect to databases for efficient data retrieval and manipulation.
- Build CRUD operations for server-to-database interactions.
- Implement RESTful APIs for communication between client and server.
- Integrate authentication and authorization mechanisms.
- Implement asynchronous operations and handle events on the client side.

Welcome to CIT 438–Web Systems Development II

I'm **Jeffrey Myers, M.S.**, and I'm looking forward to a rewarding and engaging semester with hands-on implementation of modern web technologies. Let's build something great together!

Class Location & Technology Requirements

This class is fully **online** via Blackboard: <https://blackboard.wku.edu>. A reliable internet connection is essential, and students are expected to have access to productivity software like PDF readers, word processors, browsers, etc.

Required Material(s)

zyBooks: Web Programming with zyLabs

To access the material(s), you need to do the following:

1. [Sign-in](#) or [sign-up](#) to zyBooks.
2. Purchase a subscription.
3. Enter the following zyBooks code: **WKUCIT438MyersFall2025**

Instructor Information

Name: Jeffrey Myers, M.S.
 Office (Zoom): 791 730 0764
 Email: jeffrey.myers@wku.edu
 Office Hours: By appointment only

IMPORTANT: Email is the best way to contact me. Please allow up to 24 hours for a response. As I also work outside of teaching, I am regularly **unavailable Tuesday–Friday before 6PM CST**.

Grading Policy**Letter Grade Distribution**

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	Below 60%

Percent Weight Distribution

Exams	30%
Assignments	35%
Discussion	5%
Final Exam	30%
Total	100%

Rescheduling Exams - Request at least one week prior, unless extreme circumstance.

Late Submissions – No late submissions are accepted past the one week extended due dates.

Extending Due Dates – Due dates extend to one week past the official due date without penalty.

Grade Reporting - Grades and feedback posted via Blackboard; monitor regularly.

Academic Dates - Consult [WKU's calendar](#) for drop deadlines and final exam schedule.

Assignment Submission Rules

1. Follow all assignment guidelines to avoid point deductions.
2. Keep copies of all work; proof of on-time submission is the student's responsibility.
3. Submit all work via Blackboard and zyBooks.
4. Academic dishonesty will result in a zero and possible disciplinary action.

Instructor Feedback

Grades and feedback posted within one week. If erroneously marked missing, notify me immediately with submission details for correction (within one week).

Ogden Student Course Attendance Statement

The faculty and staff of Ogden College of Science and Engineering are committed to providing you with learning experiences and opportunities. You must assume ownership of your education and be an active participant in the classroom and laboratory to take advantage of these opportunities. Active participation requires you to attend. Scientific studies have shown that attendance during scheduled classroom and laboratory meetings is directly correlated to your performance on assignments and exams and the potential to earn higher grades. Additionally, if you do not regularly attend class, you are missing important information about course topics, due dates, and assignment details that are crucial to your success in the course. Therefore, as a student enrolled in an Ogden course, you are expected to attend every class meeting and to inform your instructor regarding the reasons for any absences as soon as practical. Your instructor may incorporate class attendance/participation as part of the grading criteria.

Attendance Policy

Because this is an online course there is no classroom attendance requirement. However, I strongly encourage you to remain actively involved in this course. Some suggestions for doing this are: 1) check your WKU email and Blackboard regularly for course announcements and information; 2) stay abreast of all due dates as they are added to the course schedule on Blackboard; 3) contribute regularly and effectively to the online discussions; 4) complete all work on time and to the very best of your ability.

Non-Graded Assignments

Some activities (like readings) aren't graded but are essential. Skipping them may hurt your performance on graded work.

Incompletes & Extra Credit

Incompletes: Must follow school guidelines.

Extra Credit: None offered; assignments reflect the full scope of the course.

Course Schedule (Outline)

Module 1 (Weeks 1–2) – HTML, CSS, JavaScript Refresher

- Chapters 1–6 condensed refresher
- Baseline quiz

Module 2 (Weeks 3–4) – JavaScript in the Browser

- Chapter 7
- DOM manipulation, events, forms, JSON, APIs

Module 3 (Weeks 5–6) – More JavaScript

- Chapter 8
- ES6+ features, promises, async/await, fetch

Module 4 (Weeks 7–8) – Node.js Express, Databases & APIs

- Chapter 10
- Server setup, routing, middleware
- Database integration (SQL & Mongo)
- REST API creation

Module 5 (Week 9) – Midterm Exam Prep

- Review + practice exam
- No new zyBook content

Module 6 (Weeks 10–11) – Mobile Web Development (Fall Break week)

- Chapter 9
- Responsive design, media queries, Bootstrap

Module 7 (Weeks 12–13) – Node.js Security & Full Stack Integration

- Authentication
- Password hashing, tokens
- Tying front-end and back-end together

Module 8 (Weeks 14–15) – Web Accessibility & Artificial Intelligence

- Chapter 12 + Chapter 13 (condensed overview)
- A11y principles, WAI-ARIA, tools
- Intro to AI integration in web applications

Module 9 (Week 16) – Final Exam Prep

- Review & practice exam
- No new zyBook content

Note: Expect weekly assignments with a minimum of 2–3 hours per week. Submit at least two days early to resolve any technical issues.

Academic Standards

All students are expected to support the same respect for individuals, commitment to issue and problem resolution, and open communication and feedback as in any learning environment. Specifically, all students are expected to:

- Accept responsibility and accountability for all use actions and content posted to any online classroom, public meeting or personal inbox (email).
- Maintain the same ethical standards expected in a collaborative, academic environment.
- Demonstrate respect for all faculty, students, and staff regardless of age, race, gender, religion, national origin, veteran's status, disability, or sexual orientation.

In the online environment, the following will not be tolerated:

- Harmful, threatening, libelous, or abusive content.
- Profanity of any kind.
- Copyright infringement or violation of patent, trademark, proprietary information, or confidentiality agreements.
- Misrepresentation of identity through alteration of inbox (email) names.
- Posting unsolicited advertisements to public meetings or private inboxes- no spamming!
- Transferring computer viruses, intentionally or unintentionally, or other code that disrupts or interferes with other users' use of the online environment or personal computers, systems, or networks.

Academic Honesty & Use of AI Tools

Students must submit original work. Plagiarism, cheating, or unacknowledged use of others' ideas will result in failure of the assignment or course and possible expulsion. AI (e.g. ChatGPT, GrammarlyGO) is only permitted for learning—not for completing assessments. Misuse is a violation of academic integrity and [WKU's Student Code of Conduct](#).

Class Navigation & Tech Access

Log in at [Blackboard](#) for course materials, quizzes, and announcements. Reliable internet and access to software is required; lack of access is not excuse for missed work.

Technology Issues

Email me assignments for timestamping if Blackboard is down, but upload to Blackboard once restored. If an exam locks you out, notify me immediately; last-minute timing may prevent reset. For tech issues, contact [WKU ITS](#).

Late Assignments

Due to the nature of this course, it is critical that you are timely in submitting the assignments. Assignments may be submitted late if necessary but at the cost of a 5% grade reduction per day it is late. Late submissions will not be accepted later than one week after the due date. However, it is strongly suggested that you submit assignments on time.

Schedule Exceptions & Drops

Schedule changes (e.g. due date extensions or exam rescheduling) require email approval and are only granted for extreme circumstances. If dropped for nonpayment or similar, you may lose access and must request an extension via email.

Student Disability Services

Students requiring academic or auxiliary accommodation must contact the **Student Accessibility Resource Center (SARC)** in Dowling Student Union, 1074. Call 270-745-5004 (or 270-745-3030 TTY), or email sarc.connect@wku.edu. Do not request accommodation directly without a formal letter.

Title IX Misconduct/Assault Statement

Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) and Discrimination and Harassment Policy (#0.2040).

Sexual Misconduct/Assault Policy:

<https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf>

Discrimination and Harassment Policy:

https://wku.edu/policies/hr_policies/2040_discrimination_harassment_policy.pdf

Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.

Please note that while you may report an incident of sex/gender-based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.

ADA Accommodation Statement - In compliance with university policy, students with disabilities who require academic and/or auxiliary accommodation for this course must contact the Student Accessibility Resource Center located in Dowling Student Union, 1074. SARC can be reached by phone number at 270-745-5004 [270-745-3030 TTY] or via email at sarc.connect@wku.edu. Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center.