KELCE
COLLEGE OF BUSINESS
Pittsburg State University

Course Syllabus:
Building Web Apps with JavaScript
CIS 690, 02,
103 Kelce Center
M-W 5:00-6:15 PM, 23/SP

Instructor: John Kuefler, MBA
Hours: By Appointment Via Zoom
E-mail: jkuefler@pittstate.edu

Textbook

No textbook is required for this course. All software needed for JavaScript app development will be available in the computer labs or for free download.

Course Description

Web application development is a broad practice that is made up a wide range of software development activities. This course will focus on building web applications using JavaScript - specifically with Nodejs. Full stack development will be covered – so students will get to experience using JavaScript for both back-end and front-end development. Additionally, the basics of creating webpages using HTML and CSS frameworks will be covered, as well as interacting with databases. By the end of the class, students should have a strong foundation for web application development and should be able to build standalone web applications on their own.

Prerequisites

Prerequisite: CIS 420 Management Information Systems or ACCTG 420 Accounting Information Systems, or permission of instructor.

Course Objectives / Learning Outcomes

Upon completion of this course, students should:

1. Understand the basic principles of web application development
2. Understand the fundamentals of HTTP requests
3. Have a good understanding of the JavaScript language and its syntax
4. Know how to use Nodejs as the backend of a web application
5. Understand the fundamentals of interacting with a database from a web application
6. Have a good understanding of the Express framework and how it is used within Nodejs
7. Know the fundamentals of creating web pages and forms
8. Understand how to use basic source control software (git) when developing an app as a team
9. Be able to create a complete web application as part of a team that:
    a. Is based on a real-world scenario

b. Has user accounts/authentication
c. Interacts with a back-end database
d. Allows data to be managed through forms/interfaces
e. Is aesthetically pleasing and professional-looking

Teaching Methods

Content will be delivered primarily through two methods: lectures and discussions, and collaborative lab/development sessions. There are no exams in this course. We will rely on hands-on collaboration and assignments/quizzes that re-enforce web development concepts for student evaluation. There will also be a team project where groups of students will work to apply what they are learning to a real-world scenario.

Canvas

Canvas will be heavily utilized in this course. Supplemental materials for the course will be available on Canvas, and all homework assignments and quizzes will also be done through Canvas.

Attendance Policy

Attendance is critical to success in the class and will be a key factor in your grade. Points will be given for attendance and are worth just over 10% of your final grade. Each class attendance is worth several points, up to 50. This allows students to a couple of class periods without being penalized. Students must notify the instructor beforehand to be excused from class and have a legitimate reason such as illness or a school conflict. In those cases, students will still receive their points. The instructor may ask for proof of the need to be excused in some cases.

Attendance will be taken with an automated tool. It is the student's responsibility to check into class using this tool to be awarded attendance points. More information will be given the first day of class.

Important note: students will be excused from class and still be eligible to get their attendance points in the case of illness, or quarantine. Students should not attempt to attend class if they are feeling sick – but should instead contact the instructor so that other arrangements can be made.

Classroom Conduct

Students are expected to be punctual, respectful of the instructor and others, silence cell phones, and pay attention in class. Laptops are encouraged for note taking and following along class demonstrations/coding examples, provided they do not become a distraction.

KELCE
COLLEGE OF BUSINESS
Pittsburg State University

Course Syllabus:
Building Web Apps with JavaScript
CIS 690, 02,
103 Kelce Center
M-W 5:00-6:15 PM, 23/SP

Withdrawal

Students wishing to withdraw from the class are solely responsible for doing so. The instructor will not drop students from the course.

Academic Integrity

All Pitt State students are bound by the academic integrity policies of the university as described and outlined in the current Syllabus Supplement. Please familiarize yourself with these rules and guidelines. In addition, as a course offered through the Kelce College of Business, students in this class are obligated to adhere to the college's Student Code of Ethics as outlined below.
Students pledge to:

- Arrive on time, remain until dismissed at all class sessions, and notify instructors in advance of anticipated absences, late arrivals, or early departures whenever possible.
- Turn off cell phones or other electronic devices while in class, unless permission to use them has been granted.
- Refrain from class disturbances.
- Refrain from use of profane or vulgar language in a threatening or disruptive manner.
- Treat fellow students, staff, faculty, administrators, and property with respect.
- Refrain from giving or receiving inappropriate assistance.
- Prepare assignment and exams honestly, refraining from such unacceptable conduct as plagiarism or unacknowledged appropriation of another's work in any academic work.
- Obey the policies, regulations, and laws of the United States of America, the State of Kansas, The Kansas Board of Regents, Pittsburg State University, and the Gladys A. Kelce College of Business.
- If a student observes someone committing dishonesty in connection with academic work, the student is encouraged to report that dishonesty to the appropriate individual (ex, faculty member, or administrator).

KELCE
COLLEGE OF BUSINESS
Pittsburg State University

Course Syllabus:
Building Web Apps with JavaScript
CIS 690, 02,
103 Kelce Center
M-W 5:00-6:15 PM, 23/SP

Duplicate/Plagiarized Work Policy

If multiple students submit the exact same work for an assignment, one of two things must have happened:

a) The students both copied the same answers from the internet
b) One of the students did the work and shared their answers with another student or students

Both of these scenarios are unacceptable. If any assignments are submitted that are exactly the same, all students submitting these assignments will receive a 0 on these submissions, with no exceptions. It is critical that you complete your own work, not only for academic integrity, but also so that you learn something in this class. It's ok to collaborate with other students, but do not copy other's work. It is particularly easy in a class like this to spot submissions that are exactly the same, since we're dealing with code, so don't do it.

Students with Disabilities

Please inform the instructor if you have a learning or physical disability that interferes with course requirements. Assistance and/or appropriate accommodations may be available through the contacts listed on the current Syllabus Supplement.

Course Evaluation Methods

Item	Total Points
Attendance	50
Homework	100
Project	200
Quizzes	50

Course Outline

The following topic outline is tentative and subject to change based on the needs of the course participants and the instructor.

Week	Topic	Homework
1	Introduction to JavaScript, NodeJS, Course Project	Intro Quiz
2	Using VS Code, Stackblitz, Git	Git assignment
3	HTML & CSS, understanding the web/http requests	Web page assignment
4	JavaScript Fundamentals, JSON	JavaScript assignment
5	Introducing NodeJS and Express, linting	
6	3rd Party Packages, Routing and APIs	API Assignment

7	Introduction to Supabase	Supabase Assignment
8	Express templating, working with forms	Forms Assignment
9	Integrating databases, working with different environments	Database Assignment
10	Setting up grids	Grid Assignment
11	User accounts and authentication	
12	Consuming 3rd party APIs	3rd Party API Assignment
13	Working with files and data	Data Export Assignment
14	Advanced topics/catch-up	Review Quiz
	Fall/Thanksgiving Break	
15	Final project work	
16	Final project presentations and wrap-up	Final Project

Note

The instructor reserves the right to amend and to reorganize this syllabus at any time.