Spring 2022
IT 231 Web Development I
Tuesday and Thursday 10:10 am – 11:40 am
CDM658

Contact Info

Sean Bush
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E-mail is the preferred method of contact, as I check my email daily. Most emails will be answered within 24 hours (unless it's during the weekend, the latest I would reply is Monday morning). If you do not receive a reply within the timeframe, check to make sure the email address is correct and email me again. When emailing me, you must include the course number in the subject. Example: IT-231: question about site design.

Office Hours:
Scheduled office hours are Tuesdays and Thursdays 1:30 – 2:30 pm by appointment only via Zoom.

Course Overview
Introduction to framework-based web development. Students create interactive, dynamic websites using a common web architecture and object-based database access. Programming for web development includes control structures, objects, functions, and the use of composite data types.

Course Goals

The primary goal of this course is to provide a general understanding of programming and computing by developing elementary scripts. Specific goals include writing scripts with the following:

- Writing asynchronous code
- Creating data models
- Debugging JavaScript Modules

Changes to Syllabus
This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class and sent via email.

Prerequisites
IT 130

Textbook
This course does have a *required* text.
Get Programming with Node.js, Jonathan Wexler / Manning. ISBN: 978-1617294747

The book is available online for free via DePaul eBook Collections.

Go to either one of these links:
https://libguides.depaul.edu/az.php?t=6193. Click on O'Reilly for Higher Education.

OR

https://go.oreilly.com/depaul/
You should be able to log in using your campus connect username and password.
Type Get Programming with Node.js in the search field on the top of the page.

GRADING POLICY

Grading Scale
Course grades will be reported on the following scale:

Grade	%
A	94-100
A-	90-93
B+	87-89
B	84-86
B-	80-83
C+	77-79
C	74-76
C-	70-73
D+	68-69
D	60-67
F	Less than 60

 Grades will be posted in D2L.

ASSIGNMENTS AND GRADING POLICY:

Grading
- Projects (2)   100 points each
- Quizzes (3)   25 points each
- Final (2 Parts)   225 points

The goal of assignments is to practice the concepts taught in class. You will have a week to complete each assignment. You are expected to do your own assignments. However, some collaboration with other students is allowed and even encouraged. The following types of collaboration are allowed:

- Discussing strategies for solving a problem
- Explaining why a Web page does not work
- Reviewing and testing someone else's Web pages
- Using HTML and JavaScript code provided by the instructor and texts

The following types of collaboration are not allowed:

- Copying someone else's work
- Telling someone what code to write

Engaging in these last two types of collaboration will be considered a violation of the university's policy on academic integrity. Violators will receive a zero for the corresponding assignment and will be reported as required by the policy.

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Assignments will be accepted up to two days after the due date. 15% penalty if you submit your assignment less than a day past the due date given. Additional 15% penalty (30% total) if you submit your assignment more than a day past the due date given. Assignments submitted 2 days after the due date will **not be accepted**, as it is unfair to other students. There will not be any extra credit opportunities in the class.

Make sure you submit the correct version of your assignment. It's your responsibility to turn in the correct work for each assignment. Saying you turn in the wrong assignment will not be considered an excuse.

If you make changes to an assignment that you have already submitted, you are welcome to upload the newer version to D2L provided, of course, that it is uploaded before the assignment deadline. I will always grade your submission with the most recent timestamp in D2L.

All quizzes must be completed before the due date. Missing the due date will result in a grade of zero. You **cannot** make up quizzes.

Students who do not turn in the final project will NOT pass the course.

Communication
If you have questions or you are struggling with anything with the class – no matter how minor -- let me know right away. Do not wait! These classes move quickly. Just like on an assignment, timely communication is vital to ensure things go smoothly.

Important Dates
Last day to add or swap classes: **Friday, April 1, 2022**
Last day to drop the course without penalty: **Friday, April 8, 2022**
Last day to withdraw from the course: **Friday, May 13, 2022**

COVID-19 Health and Safety Precautions
DePaul requires wearing a mask in classrooms and labs for the first two weeks of spring quarter March 28 to April 10. Outside of these spaces, masks are recommended, but not required. Starting April 11, masks will no longer be required in classrooms and labs. If you need one, KN95 masks are available at a limited number of first-floor desk areas near building entrances.

https://resources.depaul.edu/coronavirus/faqs/Pages/classes-academics-faculty.aspx has additional information.

Respect for Diversity and Inclusion at DePaul University as aligned with our Vincentian Values
At DePaul, our mission calls us to explore "what must be done" in order to respect the inherent dignity and identity of each human person. We value diversity because it is part of our history, our traditions, and our future. We see diversity as an asset and a strength that adds to the richness of classroom learning. In my course, I strive to include diverse authors, perspectives, and teaching pedagogies. I also encourage open dialogue and spaces for students to express their unique identities and perspectives. I am open to having difficult conversations and I will strive to create an inclusive classroom that values all perspectives. If at any time, the classroom experience does not live up to this expectation, please feel free to contact me via email or during office hours.

Online Course Evaluations
Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Please see https://resources.depaul.edu/teaching-commons/teaching/Pages/online-teaching-evaluations.aspx for additional information.

Academic Integrity and Plagiarism
This course will be subject to the university's academic integrity policy. All students are expected to abide by the University's Academic Integrity Policy which prohibits cheating and other misconduct in student coursework. Publicly sharing or posting online any prior or current materials from this course (including exam questions or answers), is considered to be providing unauthorized assistance prohibited by the policy. Both students who share/post and students who access or use such materials are considered to be cheating under the Policy and will be subject to sanctions for violations of Academic Integrity. More information can be found at https://resources.depaul.edu/teaching- commons/teaching/academic-integrity/Pages/default.aspx.

Posting work on online sites
All students are expected to abide by the University's Academic Integrity Policy which prohibits cheating and other misconduct in student coursework. Publicly sharing, posting, or receiving answers to any prior or current materials from this course is considered to be providing unauthorized assistance prohibited by the policy. Both students who share/post and students who access or use such materials are considered to be cheating under the Policy and will be subject to sanctions for violations of Academic Integrity.

Academic Policies
All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar. Information on enrollment, withdrawal, grading, and incompletes can be found at:
http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx

Incomplete Grades
An incomplete grade is a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval. Information about the Incomplete Grades policy can be found at
http://www.cdm.depaul.edu/Current%20Students/Pages/Grading-Policies.aspx

Preferred Name & Gender Pronouns
Professional courtesy and sensitivity are especially important concerning individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the quarter so that I may make appropriate changes to my records. Please also note that students may choose to identify within the University community with a preferred first name that differs from their legal name and may also update their gender. The preferred first name will appear in University-related systems and documents except where the use of the legal name is necessitated or required by University business or legal needs. For more information and instructions on how to do so, please see the Student Preferred Name and Gender Policy at http://policies.depaul.edu/policy/policy.aspx?pid=332

Students with Disabilities
Students seeking disability-related accommodations are required to register with DePaul's Center for Students with Disabilities (CSD) enabling them to access accommodations and support services to assist with their success. Students need to meet with a staff member via telephone or teleconference (i.e Zoom) please notify the office when making the appointment request.

- Loop Campus (312) 362-8002
- Lincoln Park Campus (773) 325-1677
- Email: csd@depaul.edu

Students who register with the Center for Students with Disabilities are also invited to contact Dr. Gregory Moorhead, Director of the Center, privately to discuss how he may assist in facilitating the accommodations to be used in a course. This is best done early in the term. The conversation will remain confidential to the extent possible. Please see https://offices.depaul.edu/student-affairs/about/departments/Pages/csd.aspx for Services and Contact Information. Please see the CDM Intranet for general information about school policies.

COURSE SCHEDULE AND TOPICS:

Here is a summary of the course. Note that this is subject to tweaking – I will give you plenty of notice when something changes:

Session	Topics
Week 1	Course Overview HTML & CSS Review
Week 2	JavaScript Review Creating a Node.js module Building a simple web server in Node.js
Week 3	Handling incoming data Writing better routes and serving external files
Week 4	Creating your first website using Node.js
Week 5	Setting up an app with Express.js Routing in Express.js
Week 6	Connecting views with templates Configurations and error handling
Week 7	Enhancing the Confetti Cuisine site with Express.js
Week 8	Setting up a MongoDB Database Building models with Mongoose
Week 9	Connecting Controllers and Models Saving user subscriptions Enhancing the Confetti Cuisine site with MongoDB
Week 10	Final Project due

Learning Domain Outcomes

1. Students will understand the major principles guiding modern scientific thought. Students will demonstrate a mastery of the science content knowledge of their SID courses.
2. Students will know that science, technology, and math serve as mechanisms for inquiry into the nature of the universe. Students will:
   a. identify questions that can be answered through scientific investigations;
   b. design and conduct a scientific investigation to test a scientific hypothesis;
   c. use appropriate tools and techniques together, analyze, and interpret data to support or refute a scientific hypothesis;

d.   develop descriptions, explanations, predictions, and models using evidence;
e.   describe relationships between evidence and explanations using critical and logical thinking;
f.   recognize and analyze alternative explanations and predictions;
g.   communicate scientific procedures and explanations;
h.   use mathematics in all aspects of scientific inquiry.
3.   Students will understand and appreciate the interrelationships among science, technology and math. Students will:
a.   use technology and mathematics to identify a problem or design a solution to a problem;
b.   give examples of how science and technology inform and influence each other.
4.   Students will understand and appreciate the role of science in society and in their lives. Students will:
a.   provide examples of how science and technology impact our lives, and how social needs and concerns impact our development of technology and scientific investigation;
b.   develop positive attitudes towards science, technology, and mathematics;
c.   establish an ongoing experiential/service-learning interest in science, technology, and mathematics.
5.   Students will understand the nature of science, technology, and mathematics. Students will:
a.   provide examples of the abuse of science, including the representation of unfalsifiable claims as science and other forms of pseudoscience;
b.   explain the strengths and limits of scientific inquiry;
c.   explain the difference between evidence and inference, and the   provisional nature of scientific explanations by providing examples of how our understanding of the workings of the world has changed in the past;
d.   explain the difference between probability and certainty and describe what is meant by uncertainty in the context of science, technology, and mathematics.

How Learning Outcomes Will Be Met
Programming is a rigorous intellectual challenge that must be approached systematically with extreme attention to detail. The structure, grammar, syntax, and underlying theory must all be studied and reviewed to be able to not only apply the principles towards achieving a functioning program. Another very important skill is the ability to use programming to solve tasks that occur in the real world. For a web page, this might include tasks such as error checking, creating a working 'shopping basket', and so on. Even mathematical skills come into play whether it involves random number generation in a video game requiring simulated die rolls, or careful attention to the order of operations when putting together a complicated estimate from a reservations page for a travel agency's website. All of these situations (or ones closely resembling them) will be required of students at some point in the course.

Writing Expectations
Writing is integral for communicating ideas and progress in science, mathematics, and technology. The form of writing in these disciplines is different from most other fields and includes, for example, mathematical equations, computer code, figures and graphs, lab reports, and journals. Courses in the SI domain must include a writing component where that component takes on the form appropriate for that course (e.g., lab reports, technical reports, etc.)

How Writing Expectations Will Be Met
In the course of the quarter, students will be required at times to provide clearly written summaries explaining some of the programming and web-design theories expounded upon during the course. The student will also be required to explain their own reasoning accompanied by specific examples from their own code and their interpretation of code found during the exploration of well-designed web pages created by others.

Other

Attitude: A professional and academic attitude is expected throughout this course. Measurable examples of non-academic or unprofessional attitude include but are not limited to talking to others when the instructor is speaking, mocking another's opinion, sleeping, working on assignments for other classes, or cell phones ringing.

Civil Discourse: DePaul University is a community that thrives on open discourse that challenges students, both intellectually and personally, to be Socially Responsible Leaders. It is the expectation that all dialogue in this course is civil and respectful of the dignity of each student. Any instances of disrespect or hostility can jeopardize a student's ability to be successful in the course.

Cell Phones / On-Call: If you bring a cell phone to class, it must be off or set to silent mode. Should you need to answer a call during class, students must leave the room in an undisruptive manner. Out of respect to fellow students and the professor, texting is never allowable in class. If you are required to be on call as part of your job, please advise me at the start of the course.

Student responsibilities: Each student is responsible for their time management and for meeting the expectations in the syllabus. The instructor is not responsible for reminding students of assignment deadlines in class. In the event of an absence, it is the student's responsibility to contact the instructor regarding the absence and the topics covered in class. Students must keep up with any assigned materials for the class. Students must keep backup copies of all submitted assignments.