

CPSC 314

Web Development

Syllabus

Last Updated 29 August 2020

(Note: syllabus subject to change, your instructor will make an announcement if changes occur – all times are in PST/PDT)

Basic Facts

Instructor: Daniel Olivares, PhD
olivares@gonzaga.edu
Phone: 509-313-5753
Office: Herak 309A
Office Hours:

Monday and Friday 10:00AM-11:00AM via Zoom*

Wednesday 10:00AM-11:00AM and 3:00PM-4:00PM via Zoom* and in Herak 309A **(by appointment only)**

Meetings: MWF 2:10PM-3:00PM via Zoom*

Online: Course website hosted on Canvas: <https://canvas.instructure.com/>

Important Note: Use this URL, not the first URL when you Google “Canvas” as it may be incorrect!

Required Hardware/Software:

- A laptop adhering to GU SEAS requirements. Click [here](#) to learn more about the requirements.
- [VirtualBox](#), which is available for Windows, MacOS, and Linux. You will be provided with a SEAS VirtualBox system image that will be used for many tutorials and examples for this course and will allow you to have a development environment that matches that being used for instruction. You may use alternate software but note that I may not be able to assist you with any technical difficulties you may run into outside of my experience.

*Note for remote semester: Normally you are expected to bring your laptop to class regularly to complete and participate in in-class activities and assignments. In this semester’s remote format, you can get by just as well if you are on **any computer that can run the required software.***

Textbooks: **Required:** Introduction to Web Development (a zyBooks book ISBN: 978-1-394-04729-1). This is an online interactive textbook. Follow these instructions to gain access to the book:

1. Sign in or create an account at learn.zybooks.com
2. Enter zyBook code: **GONZAGACPSC314OlivaresFall2020**

3. Subscribe

A subscription is \$58 and will last until **January 14, 2021**. Students will be able to subscribe until December 15, 2020.

Additional Notes:

- *You are required to register with your official @gonzaga.edu student email.*
- *Though access to the digital book is not indefinite, you may print (or download as PDF) the zyBooks contents during subscription time to maintain an offline, **non-interactive**, copy of the book.*
- *If you have any difficulty with or questions about zyBooks usage, support is available at the zyBooks help desk:
<https://zybooks.zendesk.com/hc/en-us/sections/360001556914-Students>*

Course Information

- Techniques of web page development. An introduction to web programming. Emphasis is on web programming basics using well-established web structure and style.
- Credits: 3.00
- College: School of Engineering/Applied Science (SEAS)
- Department: Computer Science
- Prerequisites: CPSC 122

Course Description

This course covers the basics of web programming and development. Students will be introduced to the history of the web, IP addresses, domain names, URLs and HTTP. Topics will focus on using the HTML5 standard, which uses HTML, CSS, and JavaScript to create web pages and web applications. The final third of the course will cover more advanced web programming topics and conclude with a final project and presentation.

Learning Objectives

By the end of this course, you should be able to

- Design and deploy functional and flexible web sites.
- Understand how HTML, CSS, and JavaScript separate a document structure, presentation, and web page interaction with a user.
- Create highly-interactive web pages using HTML, CSS, and JavaScript.
- Understand the overview of full stack development and web applications.
- Demonstrate a basic understanding and use of Git version control and the GitHub/GitHub Classroom platforms.

Course Activities and Structure

Class Meetings. Class meetings will typically contain a mix of lectures, interactive examples, interactive group activities, and small and large group discussions. You are expected to read the assigned material **before class**, and you are required to bring your laptop to every class (**remote semester: you should be on a computer that can run the required software**), as you will use it to engage actively in course activities.

In addition, in many class meetings, you will engage in **small group activities** in which you (a) work on small design scenarios/problems with your peers for feedback and discussion; or (b) work on small design and problem-solving tasks in teams, and then present your progress to the class for feedback and discussion. These activities will provide opportunities to practice concepts and methods being explored in the class.

Canvas is the online presence for this course. You can access it at <https://canvas.instructure.com/>. Once you log on to our course site, you can read course announcements, participate in online discussions, send messages to course participants, access course materials, hand in course deliverables, review peers' work, and access your grades. This is where you will also find all private URLs, e.g., Zoom, and Discord invites.

Lecture Format (REMOTE ONLY): Synchronous Remote Only: meaning the class will be fully remote utilizing video conferencing software, following a normal course format with much of the instruction delivered synchronously. **Lectures** will be held live via Zoom sessions (and recorded – *see the course policies addendum document regarding use of these recordings*) during the normally scheduled course time block. Breakout rooms will be used to facilitate the above-mentioned small group activities. See participation for more details on attendance and participation expectations.

Office Hours: These will be held digitally via Zoom* and, alternately, appointments can be scheduled for in-person office hour time on Wednesdays during the normal office hour periods. Note that these must be **scheduled in advance** and you must acknowledge and follow all COVID-19 campus procedures <https://www.gonzaga.edu/zagon/top-10-things-you-need-to-know-for-your-return-to-campus>

Communication

We will use Canvas to communicate, submit assignments, and view grades. A URL invitation link will be sent to your official @zagmail.gonzaga.edu email to provide course access.

*Note: Please use Canvas as the primary communication method for course-related messages. I will monitor email as well but using Canvas is the preferred communication method. This will increase your message visibility and reduce likelihood of emails getting flagged as spam or getting lost in transit. Further, **any course-related emails should be sent from your official @zagmail.gonzaga.edu student email.***

Additionally, [Discord](#) (free to use) will be used to augment class communication and digital office hours—ask questions and discuss topics with other students in the class, Graders/TAs, and the instructor. Discord supports voice and text communication as well as screen sharing capabilities (*see Canvas for server invite URL*).

Zoom* will be used for lectures and for all office hours. **Please log in with your Gonzaga credentials and not separate free Zoom account credentials** (use the SSO log in method with gonzaga as the domain).

All communication methods are not to be used to share code solutions (*see academic honesty policy*).

You can, however, post high level code explanations and/or snippets of pseudocode. I will also post/email important information to you through Canvas and Discord announcements channels/feed.

You are expected to check announcements on Canvas and your GU email regularly.

Course (Digital) Classroom Etiquette

- Please be conscious of appropriate behavior and background while displaying your camera or sharing your screen.
- Test your camera and microphone prior to joining the Zoom session.
- Do not forget that you have your camera/microphone enabled! (I can mute these if needed)
- Be kind, please rewind.

Grading

Your grade for the course will be based on the following items (weights are in parentheses):

- **Participation (10%).** Because this course can depend heavily on in-class activities, you are expected to do your best to attend class meetings and to participate actively. I understand that you may need to miss class occasionally for valid reasons. For this reason, your **three lowest class participation scores will be discarded—that is, you will receive three free attendance/participation credits.** Discrepancies in participation need to be brought to my attention within a week of the posted grade.

In-class participation (credit/no credit) will be given based on submission of in-class activity artifacts (i.e. work done during class). Submissions that display minimal/no effort will not receive credit! Make an honest effort to complete the given tasks for participation credit! To accommodate the unique situation we are in this semester **participation submissions will be accepted by the end of the class day.** This is to accommodate those that are unable to attend the lecture period synchronously. Please note that I will aim to have lecture recordings uploaded by the end of the business day (by 5:00PM PST/PDT) and the URL posted to our Canvas course site.

- **ZyBook Participation (10%).** You will be graded for completing participation activities in the zyBooks textbook. Completing 80% of participation activities (orange) for a chapter constitutes full credit for the participation activities. Note that each category of activities for a chapter is scored separately and is scored all or nothing. **Late completion of ZyBook participation or challenges will not receive credit.** Participation activities will be scheduled to be **due BEFORE we start the topic covered (2:00PM PST/PDT)** so that you can come prepared to lecture periods where we will expand on and reiterate the

key topics and so that you can actively participate during small group activities. *Note that you are not expected to have mastered the topics prior to the lecture.* The intent is for you to have some minimal level of familiarity to better inform question asking and discussion activity during lectures.

ZyBook Challenge Activities are not part of your participation score but can be completed to make up for missed ZyBook Participation Activities. **Two** chapters of challenge activities (blue) completed 100% **AND** by the challenge activity deadline (11:59PM PST/PDT) will replace a single missing participation activity score. *For example, if you fail to complete 80% of ZBP S2 on time, you could complete ZBC S2 and ZBC S3 (BOTH ON TIME and completed 100%) to get credit for the missing ZBP S2 participation score.* Note that any challenge activities will count towards this rule. If you complete ZBC S2 and ZBC S3 and all participation prior to these challenge activities, they can still count for future missed participation – With that said, I encourage you to complete all challenge activities to 100% – not only to cover for missed participation but also to practice and reinforce your knowledge of the topic material.

- **Individual Assignments (30%).** Through a series of individual assignments, you will practice the key skills being taught in the course. These will be assigned once per topic and due shortly after covering the topic.
- **Exams (20%).** Two midterm exams, worth 10% each, will cover the topics over the first two thirds of the course from the ZyBook text.
- **Final Project (30%).** Students will be responsible for choosing, completing, and presenting a final project demonstrating the cumulative skills learned throughout the course. The final project grade is split into 3 intermediate web project deliverables (WPD) at 5% each, a final 4th WPD of the completed project weighted at 10%, and a final presentation video weighted at 5% of your final course grade.

Grading Scale

The following scale will be used to convert your course percentage into a grade.

A	100-94	C+	77-79.99
A-	90-93.99	C	73-76.99
B+	87-89.99	C-	70-72.99
B	83-86.99	D+	67-69.99
B-	80-82.99	D	60-66.99
		F	<60

Suggestions for Getting the Most out of This Course

- **Adopt a growth mindset.** The concept of a “growth” vs. a “fixed” mindset, and [cited research](#) a legacy of research that demonstrates the positive impact a “growth” mindset can have on learning and success. View [Carol Dweck’s Ted Talk](#) on the power of the growth mindset. The structure of this course, and my approach to teaching, aim to create a learning environment

that promotes a growth mindset. By being aware of the concept and principles, you can positively contribute to that environment.

- **Attend class.** You can only benefit from this course if you show up! This is especially true of the group activities. I expect you to participate actively in class by asking questions, answering questions, and engaging in the collaborative design and problem-solving activities. Remember, part of your grade is based on attendance and participation (see above).
- **Put in enough time.** My rule of thumb is that students need to put in 3-4 hours of work outside of class for every hour they spend in class. This translates to roughly **6-8 hours per week**. You may need to put in only a fraction of 6 hours during some weeks, while you will find yourself putting in more than 6 hours during other weeks—especially during weeks in which pieces of your final design project are due.
- **Take initiative to get help.** You are strongly urged to "get by with a little help from your friends," as the familiar song goes. You can do this in two ways. First, I recommend that you find students in the course with whom to meet and discuss course material. Second, take the initiative to contact the instructor or other students if you begin to struggle. It behooves you to seek help as soon as you notice that you're struggling.
- **Have reasonable expectations.** Learning does not come "for free"; it is not simply a matter of "being taught." Your destiny in the course is up to you (growth mindset!). If you take an active role in your own learning, you will excel in this course, and have fun doing so. If, in contrast, you treat this course in the same way you treat television or video games—as an information "delivery" system—you will likely not get much out of the course, and your grade will suffer.

Schedule

See the detailed schedule posted on Canvas.

Policies

Please familiarize yourself with the following course policies. By following them, you will get the most out of this course, and you will not encounter any unwelcome surprises down the road.

- **Add a profile picture to Canvas.** Uploading a recent picture of yourself to Canvas will help me, the TA, and other students in the class to associate your name with your face. I would greatly appreciate it if you would do this, as it will help me to learn your name more quickly.
- **Corresponding with the instructor via e-mail.** Please e-mail me only through Canvas; do not e-mail me directly, except in an emergency. If you think your question is of general interest to the class,

consider posting it to the course activity feed in Canvas. In general, you can expect an e-mail response from me quickly, and certainly within **24 hours** of sending it.

- **Accessing course materials.** Canvas is the online presence for this course. **Log in regularly (every day)** to view course announcements, view the course calendar and schedule, participate in the course feed, access course materials, access your grades, and submit assignments.
- **Checking your grades.** To view your current grades, click on the Grades tab in Canvas. My goal is to have work graded within one week of the final deadline, but this may not always be possible. Please check your grades regularly to ensure that your grades have been entered properly, and please let your instructor or the TA know as soon as possible if you detect an error.
- **Challenging a grade.** If you believe that I have made a mistake in grading an assignment, you have **one week (from the time your grade is first posted to the gradebook)** to discuss the matter. Such discussions should take place through Canvas—never in class (see point above). Please discuss grading issues as soon as possible. Students have often attempted to bargain for points well after their grades have been posted—often near the end of the semester when they have realized that they needed more points to obtain a certain grade. Please do not attempt to do this!
- **Exams.** Please plan to set aside the required amount of time to take the exam in one sitting. In general, I will not allow you to make up the exam unless you (a) have a legitimate excuse (e.g., medical or family emergency) and (b) make other arrangements with me at least one week in advance of the exam. If a genuine emergency comes up and you cannot give me due notice of your need to make up an exam, I will accept make-up requests after the fact, provided that they are submitted to me no later than 24 hours after the starting time of the exam you missed. I will review each case on an individual basis, and I will let you know if your request is granted no later than 24 hours after it is submitted. Note that makeup exams will be modified from those given during the regular exam period.
- **Late policy for assignments.** **Deadline reminders are a courtesy, not a requirement. You are responsible to follow the course calendar and be aware of provided due dates!** Course assignments are due by the stated due dates and times. Please see each assignment prompt for that assignment's late submission policy. **Note that some assignments may be time sensitive and will not allow for late submissions.** In cases of illness and extenuating personal circumstances, you may request via email that an exception be granted to this policy, but your request must be issued in a timely manner (preferably in advance of the due date), and there is no guarantee that it will be granted.
- **Gonzaga Policies:** Please see the attached **Gonzaga Syllabi Policy Addendum** for policies updated for the Fall 2020 semester. Religious Accommodations for Students, Class Attendance (Modified, Fall 2020), COVID-19 Class Expectations (New, Fall 2020), Class Recordings (audio, video and photos) (New, Fall 2020), Students with Disabilities/Medical Conditions and Accessible Documents (EITA)

(Modified, Fall 2020), Academic Integrity Policy, Diversity, Equity and Inclusion, Harassment, Discrimination and Sexual Misconduct Policies, FERPA and Privacy, Course Evaluations

- **Resources and Success for Well-being.** Please take care of yourself and your fellow zags! Be aware of the student support resources that the University provides for you. Additional resources for student support are available at <https://www.gonzaga.edu/academics/Diversity/CampusClimate/campus-and-local-resources.asp>
 - **Center for Cura Personalis.** The [Center for Cura Personalis](#) serves students in many ways including through proactive outreach and educational programs about healthy choices and interventions for students who may be struggling.
 - **Health and Counseling Services.** Health & Counseling Services functions as your private physician's office and counseling center. Health & Counseling Services is a confidential resource. To schedule an appointment, please call 509-313-4052.
 - **University Ministry.** University Ministry's mission is to support members of the Gonzaga community in their spiritual growth and development, empowering them to live out God's love in the world. Contact: University Ministry, Hemmingson Center 104, x4242 or umin@gonzaga.edu
 - **Campus Security and Public Safety.** At Gonzaga we believe that the security of our campus is a responsibility shared by all members of the community. For more information, visit the [Campus Security and Public Safety](#) site.

Gonzaga Syllabi Policy Addendum

Religious Accommodations for Students

In compliance with Washington State law, Gonzaga University will reasonably accommodate students who, due to the observance of religious holidays, expect to be absent or endure a significant hardship during certain days of their academic course or program. Gonzaga University prohibits discrimination, harassment, and retaliation on the basis of religion. The Religious Accommodations for Students policy as well as the process by which students can request accommodations can be found on the [Academic Policies and Procedures webpage](#).

Class Attendance (Modified, Fall 2020)

Gonzaga University presumes that students have sufficient maturity to recognize their responsibility for regular class engagement, and we maintain a general expectation that students will attend courses either in-person or in some remote modality. However, in order to prioritize the health and safety of all community members, Gonzaga's regular in-person attendance policy has been modified for the Fall 2020 semester ([Amended Class Attendance Policy](#)). In accordance with this policy, instructors are asked to communicate their expectations for in-person and synchronous remote participation; to record attendance for each in-person and synchronous remote class session for contact tracing and tracking COVID community spread ([CDC-Higher Education](#)); and to maintain assigned seating. Additionally, instructors are required to accommodate students who must or choose to attend classes remotely on a short- or long-term basis and are expected to be highly flexible in accommodating students who become ill. Placing safety first, students must follow COVID- related protocols as described in the [Student Arrival & Return to Gonzaga Guide](#) and will in no way be penalized for following these protocols; see [Amended Class Attendance Policy](#). Students who are unable to attend class in-person should attend class in a remote modality, if possible, and should communicate directly with their instructors regarding any absences.

COVID-19 Class Expectations (New, Fall 2020)

Students are expected to have read the [Student Arrival & Return to Gonzaga Guide](#) and to understand and abide by all COVID-related protocols, including completing the daily self- certification process and not attending class in-person if they have been diagnosed with COVID- 19, are experiencing symptoms, have been exposed to COVID-19, or are informed to self- quarantine. Additionally, students are expected to follow public health practices as described in the Student Arrival & Return to Gonzaga Guide, including wearing cloth face coverings and maintaining physical distancing during class. Students must remain in assigned seats and may not rearrange classroom seating.

Class Recordings (audio, video and photos) (New, Fall 2020)

Synchronous and asynchronous remote instruction and in-person hybrid instruction will frequently utilize recorded material. For example, pre-recorded lecture material and recorded Zoom classes sessions might be uploaded into Blackboard for the benefit of students who are unable to attend in-person. [Gonzaga University's policy on Class Recordings](#) dictates that only the instructor may cause a class meeting to be recorded for those students. You shall not make audio or video recordings of class meetings without the prior written authorization of the instructor. By remaining registered in this course, you agree to your voice and image being recorded, and you agree to use any recordings of our class meetings ONLY for the educational purposes of this class (or other sections of this class taught by the same instructor). You agree to delete recordings of our class meetings no later than the end of this semester. **You do not have permission to use or share recordings (e.g., video, audio, photos) of**

our class meetings beyond the reach of our class **for any purpose**, including, but not limited to, posting to any digital application or platform, such as social media. **You may not duplicate or distribute recordings of class sessions.** In short, your instructor and your classmates intend to appear in these videos only for the purposes of carrying out our teaching and learning in this class. Your compliance with the terms of this syllabus regarding use of class session recordings is subject to the [Student Code of Conduct](#); violations will be reviewed according to the provisions in the [Administration of Student Code of Conduct](#).

Note: All recordings will be made at the instructor's discretion, with the understanding that not all course material and discussions are appropriate for recording, and that all recordings need not be shared with all students. The intention of recording classes is to accommodate students with disabilities under the ADA, or in the event a student is unable to attend a regularly scheduled class due to a COVID-19 illness. Class recordings are not meant as a substitute for synchronous instruction. Under certain circumstances faculty may need to share class recordings with other sections of the same class. However, if sensitive or personal student information is disclosed during a discussion, this practice is discouraged.

Students with Disabilities/Medical Conditions and Accessible Documents (EITA) (Modified, Fall 2020)

The Americans with Disabilities Act is a federal anti-discrimination statute that provides civil rights protection for persons with disabilities and requires that students with disabilities be guaranteed a learning environment that provides reasonable accommodations. You should contact the [Disability Access Office](#), if you believe you have a disability, a medical condition that places you in a high-risk COVID group, and/or are concerned your disability/condition would prohibit the safe use of face coverings in the classroom. In addition, Gonzaga University seeks to provide equal access to electronic content consistent with applicable federal and state laws, such that when possible "Accessible Documents" will be created with the proper formatting tools to maximize communication of content regardless of what device or adaptive equipment he or she is using; see [Electronic Information Technology Accessibility \(EITA\)](#).

Academic Integrity Policy

Gonzaga University is committed to supporting and protecting academic integrity in all aspects of what we do. Academic dishonesty includes, but is not limited to, cheating, plagiarism, and theft. Sanctions for violations of the academic integrity policy can involve a grade of zero on the assignment to an "F" grade in the course to suspension for a semester for repeat offenders. Furthermore, a retroactive grade change can occur if a written paper is plagiarized by a future student. Any such incidents of academic dishonesty will be reported to the Department Chair, relevant Deans and the disciplinary committee. The full policy can be accessed here: [Academic Integrity Policy](#). Ignorance of this policy will not serve as a defense against any violations.

Diversity, Equity and Inclusion

Our human differences contribute to the richness of our academic community life. In partnership with the [Office of Diversity, Equity and Inclusion](#), we expect all class participants to cultivate an academic environment that is welcoming and accessible to students, staff, and faculty regardless of gender, race, ethnicity, religion, disability, and sexual orientation or identity. Supporting this aim, the [Bias Incident Assessment and Support \(BIAS\) Team](#) exists to foster a campus environment where everyone feels safe and respected. If you have experienced or witnessed a bias incident, please visit

the [BIAS Report Site](#).

Harassment, Discrimination and Sexual Misconduct Policies

Harassment, discrimination, and sexual misconduct will not be tolerated at Gonzaga. Such acts are counter to our mission, values, Student Code of Conduct and are against Gonzaga policy (please review: [Harassment and Non-Discrimination Policy](#) and [Title IX](#)). All class members are expected to be courteous and respectful to one another; any disrespectful comments or behaviors will not be tolerated and will be reported. Please note that instructors are required to report any incidents of harassment, discrimination, or sexual misconduct that they learn about occurring inside or outside of the classroom. While certain community members, including faculty, are mandatory reporters, Gonzaga encourages all community members to report information about any type of gender-based harassment, discrimination, and/or sexual misconduct involving students, staff or faculty members. Reporting procedures can be found on the policy websites ([Harassment and Non-Discrimination Policy](#) and [Title IX](#)).

FERPA and Privacy

Under [FERPA](#) (Family Educational Rights and Privacy Act), your educational records are confidential and protected. Under most circumstances your records will not be released without your written and signed consent. Instructors are not allowed to publicly post grades by student name, social security number, GU student identification number, or any other identifiable means, without written consent from the student. The FERPA policy does not apply to third party online applications that may be used in courses (e.g., wikis and blogs) such that it is the student's responsibility to read the privacy documentation at each site.

Course Evaluations

At Gonzaga, we take teaching seriously, and we ask our students to evaluate their courses and instructors so that we can provide the best possible learning experience. In that spirit, we ask students to give us feedback on their classroom experience near the end of the semester. I will ask you to take a few minutes to carry out course/instructor evaluation on-line. Please know that I appreciate your participation in this process. This is a vital part of our efforts at Gonzaga to improve our classes, programs, and entire educational effort.