

CSCI 202 | Dynamic Web: Building a Web of Significance

Internet Studies Center, Western Washington University
Monday, Wednesday, Friday 1pm – 2pm Environmental Studies Building, room ES 418

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Office Hours: Monday and Wednesday 10am – 12noon, and 2pm – 4pm.

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COURSE DESCRIPTION AND OBJECTIVES

This course explores the creative, technical, and critical tools involved in realizing web-based projects. Workshops on HTML, CSS, and JavaScript are framed by cultural and political discourses examining the Internet and its history. Students will gain a deeper understanding of the technical concepts in web design while learning about the history of the Internet as well as its social, political, and philosophical implications. The course will be one part critical seminar and one part creative laboratory. Learning outcomes include:

- Design and develop dynamic websites using HTML, CSS, and JavaScript
- Discuss Internet history related ideas and technologies.
- Research societal issues associated with today's Internet, including socioeconomic impacts, privacy and surveillance, security, intellectual property, information resources and infrastructures.

ACADEMIC EXCELLENCE AND A RESPECTFUL CLASSROOM ENVIRONMENT

I expect rigorous engagement with the course readings, discussions, and assignments. As a member of this class, I expect you to do your part in maintaining a respectful classroom environment. This is particularly true when we critique your assignments. It is important that we focus on articulating thoughtful and constructive feedback. Mutual respect also extends to our discussion of ideas, acknowledging diverse and conflicting perspectives.

QUESTIONS OR CONCERNS

If you have any questions or concerns please feel free to email me, or visit me during my office hours. I am here to help you succeed. Email: oharad@wwu.edu

ASSIGNMENTS & COURSE WORK

There are several concurrent or alternating aspects to this course. (1) Theoretical: You will read a combination of scholarly and popular articles. I will lecture about related topics, and we will have class discussions. (2) Practice: In addition to the theoretical and historic aspects of this course, you are expected to create your own original web projects. Complementing this goal, we will have in class workshops, where I will introduce examples and you will use the class time to work on short exercises. Each of the three main assignments involve a written component. In both your writing, presentations, and discussions you are expected to draw explicit connections between the work produced for the assignments and theoretical arguments and ideas covered in the course. For all of your written work use the [ACM citation standards](#).

There are three main assignments in this course, along with regular readings and smaller weekly workshops and assignments that either complement or directly contribute to the creation of the larger assignments.

Please note: for some assignments expanded briefs will be provided.

(1) Hyper-text Self-portrait: Using HTML, CSS, and possibly JavaScript, to create a hyper-text self-portrait that combines numerous forms of media (images, text, sound, video, etc) to reflect on a specific aspect of your identity or day-to-day life.

On Friday 10/04, come to class with sketches (either hand drawn or in html) for your self-portrait.

Written Self-reflection (500 words): Reflect on the readings, your own experience and memories of using the internet, and the process or ideas involved with your self-portrait. **Due: 10/07**

(2) Mobile Site: Working on your own or with a partner, your goal is to create a mobile site that changes your experience of a specific location. How does it change your experience of the place? Does it augment, obscure, disorient, enhance, contextualize...?

Mobile Site Due: 10/21 As a class we will visit the various locations to review and discuss your mobile projects.

Project Documentation (750 words & photos/screenshots): Create a website that documents your project in written and visual form. You should describe the location, the location's significance, and the thinking and decision making that went into the design of your mobile site. **Due: 10/25**

(3) Community Building: Working in a small group (no larger than 4), you will create a site for a community you are already engaged with or a community you wish to create. After research and design, the site will be built with HTML, CSS, and JavaScript. This project will involve several smaller assignment/deliverables that are designed to help facilitate the design and research process, including a final project report.

Project abstract (700 words): describing the community your site will be built for, and the concept or purpose of your site, and the identification of team member roles/responsibilities. **Due 10/30**

Class Presentation of Design Documentation & User Research Plan: Your design documentation should include a system schema, information architecture, and interface sketches. Your research plan should outline how you will go about getting user feedback, the questions you are looking to answer, and the methods and techniques you will use. **Due 11/11**

First prototype: While the first prototype doesn't need to be fully functional, the goal is to have something that you can use to get feedback from would be users from your community. **Due 11/11**

User research findings: describe your research methods, process, and findings. Based on your findings, describe your recommended design decisions. **Due 11/18**

Final Project Presentation: 12/04 & 12/06

Final Project: Site & Report (1500 words): 12/13

Your community website and project report are due at the end of finals week. The project report should be at least 1500 words, document the design and research process involved in creating your community website, and should include citations from relevant readings (assigned or otherwise). Take advantage of the Hacherl research and writing center for coaching:

<https://library.wvu.edu/rws>

TURNING YOUR WORK IN

For this course you will build a class website where you will include your name and links to your three main projects, separate pages for the written aspects of the main assignments, and links to your weekly exercises. To be clear, the written aspects of your main assignments should also be published as html pages. For CS majors you can publish your class site using your CS account and html directory, for non-CS majors I suggest using github.

GRADING SCALE

97% and up A+

93-97 A

90-93 A-

87-90 B+

83-87 B

80-83 B-

77-80 C+

73-77 C

70-73 C-

60% and below will fail the course.

GRADING BREAKDOWN

Grades will be determined with the following % breakdown:

Participation: 10%

Weekly Assignments & Exercises: 10%

Project 1: 15%

Project 2: 30%

Project 3: 35%

PARTICIPATION

Participation in this class is key. Please show up to class prepared to work, be ready to discuss the readings, your work and your classmates' work, and stay focused. Ask questions in class and share your thoughts during class discussions. Challenge yourself and be encouraging of others as they do the same. Be attentive and considerate to your classmates.

Please do not use your phone or personal communications (email, Instagram, etc.) during class.

ATTENDANCE

More than two unexcused absences will lower your final grade by one whole unit (for example, A to B). Each additional unexcused absence will lower your grade by another unit. If there is an emergency and you must miss class, please email Carlos before class. Absences will not be excused after the fact except in extreme circumstances. Illness requires a doctor's note.

COMMITMENT TO DIVERSITY

In this class we make a commitment towards diversity by acknowledging the different identities and backgrounds we inhabit. A collaborative effort between the students and the teacher is needed for creating a supportive learning environment. If a class member says that something you have said or shared with the group is offensive, remember this is a valuable opportunity for everyone present to grow and learn from one another with further discussion. All class members are encouraged to discuss such instances with the instructor so they can be addressed with greater care in the future.

STUDENTS WITH DISABILITIES

Students with documented disabilities who wish to discuss academic accommodations should contact the disAbility Access Center (<https://disability.wvu.edu/>) and must notify the instructor at the start of the quarter so that appropriate accommodations can be arranged and coordinated with the DAC well in advance of course assignments and due dates.

RELIGIOUS ACCOMODATION

Western provides reasonable accommodation for students to take holidays for reasons of faith or conscience or for organized activities conducted under the auspices of a religious denomination, church, or religious organization. Students seeking such accommodation must provide written notice to their faculty within the first two weeks of the course, citing the specific dates for which they will be absent. "Reasonable accommodation" means that faculty will coordinate with the student on scheduling examinations or other activities necessary for completion of the course or program and includes rescheduling examinations or activities or offering different times for examinations or activities. Additional information about this accommodation can be found in SB 5166: Providing religious accommodations for postsecondary students.

For a comprehensive list of university policies visit: <https://syllabi.wvu.edu/>

YOUR WELLBEING

I care about your wellbeing. Please take care of yourself. Stay well rested. If you are not feeling well, email me and stay home to rest. Hot tea and sleep can go a long way. If you need medical attention, please visit the student health center.

If you experience some form of harassment, violence, or discrimination on campus, you can report this with the Equal Opportunity Office, or speak confidentially with a counselor at the Counseling Center. Take advantage of the resources on campus. For a comprehensive list of student resources at Western visit: <https://syllabi.wvu.edu/campus-resources/>

The Student Health Center: The Student Health Center at Western Washington University is a primary care medical clinic specializing in college health.

Consulting Nurse Line: 1-800-607-5501

Location: 2001 Bill McDonald Parkway

<https://studenthealth.wvu.edu/>

Counseling Center: The Mission of the Counseling Center is to facilitate student success and psychological well-being through culturally sensitive clinical services, outreach, and consultation.

Schedule an appointment: 360-650-3164

Psychological Emergency Services: 360-650-3164

Location: Old Main 540

<https://counseling.wvu.edu/>

Report an Incident of Sexual Violence, Harassment, or Discrimination: Western Washington University is committed to providing an environment in which students, staff, and faculty can learn and work free from all types of sexual misconduct. Sexual misconduct includes sexual harassment, gender-based harassment, sexual assault, dating and domestic violence, and stalking. Western takes action to prevent sexual misconduct, support survivors, and hold perpetrators accountable. See website for more information and options for reporting an incident and getting help.

<https://wp.wvu.edu/sexualviolence/>

Gender-neutral Bathrooms: Gender neutral bathrooms are available throughout campus. In the environmental studies building the gender-neutral bathroom is found at: ES-521. Campus map:

http://www.wvu.edu/map/wvu_gn_restrooms.pdf

WEEKLY SCHEDULE

HELLO WORLD

WK01 WEDNESDAY 09/25

Personal introductions and overview of class syllabus.

WK01 FRIDAY 09/27

Discuss readings.

Download text editor.

Setting up student websites for class.

Readings

Carey, J. (2009). Technology and Ideology: The Case of the Telegraph

Wu, T. (2010) The Master Switch: The Rise and Fall of Information Empires. Chapters 1 and 15, pages 3 -14, and 196-203

Wells, H.G. (1938). World brain: The idea of a permanent world encyclopedia. From World Brain, pp. 83-88. New York: Doubleday. http://sherlock.berkeley.edu/wells/world_brain.html

Bush, V. (1948). "As we may think.: The Atlantic Monthly, 101-108. <http://www.ps.uni-sb.de/~duchier/pub/vbush/vbush-all.shtml>

WK02 MONDAY 09/30

Lecture: introduction to W3 (including overview of the DOM, and html elements.)

Discuss readings.

Readings

Nelson, T.H. (2003 [1974]). Excerpts from "Computer Lib/Dream Machines." In N. Wardrip-Fruin and N. Montfort (Eds.), 'The New Media Reader, pp. 303-338.

Berners-Lee, T. (1989) "Information management: A proposal."

Target, S. (2018) "The World Wide Web and Its Inventor"
<https://twobithistory.org/2018/06/10/birth-of-the-web.html#fn:1>

WK02 WEDNESDAY 10/02

Discuss readings.

Design exercise: using CSS grids reproduce a painting in the browser.

Readings

Gillespie, T. (2006) Engineering a Principle: 'End-to-End' in the Design of the Internet. Social Studies of Science, Vol. 36, No. 3. Sage Publications

Dourish, P. (2015) Not The Internet, but This Internet: How Othernets Illuminate Our Feudal Internet. 5th Decennial Aarhus Conference on Critical Alternatives

WK02 FRIDAY 10/04

Design exercise: Using html text and CSS transitions, animate a poem.

Potential time to work on your self-portrait.

WK03 MONDAY 10/07 - Self-portrait Review

Your self-portraits are due! We will review and discuss your work.

WK03 WEDNESDAY 10/09

Lecture: from theories of information to professional best practices: user research, information architecture, and human-centered design.

Discuss readings.

Readings

Bates, Marcia J. (2010) Information Behavior In Encyclopedia of Library and Information Sciences, 3rd Ed. Marcia J. Bates and Mary Niles Maack, Eds. New York: CRC Press, vol. 3, pp. 2381-2391.
<https://pages.gseis.ucla.edu/faculty/bates/articles/information-behavior.html>

WK03 FRIDAY 10/11

Lecture & Design exercise: JSON

Identify a partner for the mobile project. Start thinking about your project, over the weekend select a location and write/sketch out a couple ideas.

Readings

Aston, B. (2015) "A brief history of JavaScript"
<https://medium.com/@benastontweet/lesson-1a-the-history-of-javascript-8c1ce3bffb17>

Target, S. (2017) "The Rise and Rise of JSON"
<https://twobithistory.org/2017/09/21/the-rise-and-rise-of-json.html>

YOU ARE HERE

WK04 MONDAY 10/14 – Leave your phone at home

Lecture: ubiquitous fantasies

Discuss readings.

Jennifer Valentino-Devries, Natasha Singer, Michael h. Keller and Aaron Krolik. 2018. Your Apps Know Where You Were Last Night, and They're Not Keeping It Secret. New York Times.

WK04 WEDNESDAY 10/16

Design exercise: responsive design.

Work on mobile site project.

WK04 FRIDAY 10/18

Work on mobile site project.

WK05 MONDAY 10/21 - Mobile Site Review

Your mobile site is due. We will use Monday and Wednesday to walk to the various locations and interact with your sites and have a constructive critique.

WK05 WEDNESDAY 10/23 - Mobile Site Review

We will walk to the various locations and interact with your sites and have a constructive critique.

WK05 FRIDAY 10/25

Work on Mobile Project Documentation (750 words & photos/screenshots) is due.

Form Community website groups.

NETWORKED COMMUNITIES

WK06 MONDAY 10/28

Lecture: Networked Communities, & user research / human-centered design

Discuss readings.

readings

Star, S. L., & Ruhleder, K. (1996). Steps toward an ecology of infrastructure: Design and access for large information spaces. *Information systems research*, 7(1), 111-134.

danah boyd. (2010). "Social Network Sites as Networked Publics: Affordances, Dynamics, and Implications." In *Networked Self: Identity, Community, and Culture on Social Network Sites* (ed. Zizi Papacharissi), pp. 39-58.

WK06 WEDNESDAY 10/30

Discuss readings.

Design exercise: workshop project idea

Readings

Bowker, G. C., & Star, S. L. (1999). The case of race classification and reclassification under apartheid. *Sorting things out: Classification and its consequences*, 195-225.

Knobel, C. Bowker, G. (2011). "Comuting Ethics Values in Design: Focusing on socio-technical design with values as a critical component in the design process. *Communications of the ACM*.

WK06 FRIDAY 11/01 - No Class, go spend the day with your community.

Project abstract (700 words) is due. Describing the community your website will be built for, and the concept or purpose of your website. Additionally, identify your team member roles and their responsibilities. I'll give you more information on this later.

WK07 MONDAY 11/04

Discuss readings, and discuss on connections you are making between readings, and their relationship to your project idea.

readings

Loukides, M. (2019) "It's time to rebuild the web"
<https://www.oreilly.com/radar/its-time-to-rebuild-the-web/>

WK07 WEDNESDAY 11/06

Design sprint: time to work on your project.

WK07 FRIDAY 11/08

Design sprint: time to work on your projects.

WK08 MONDAY 11/11 – Project Presentation

Class Presentation of Design Documentation & User Research Plan: Your design documentation should include a system schema, information architecture, and interface sketches. Your research plan should outline how you will go about getting user feedback, the questions you are looking to answer, and the methods and techniques you will use.

Prototype of site: While the first prototype doesn't need to be fully functional, the goal is to have something that you can use to get feedback from would be users from your community.

WK08 WEDNESDAY 11/13

Design exercise.

Time to work on your project.

WK08 FRIDAY 11/15

Design exercise.

Time to work on your project.

WK09 MONDAY 11/18

Time to work on your project.

Project group discussions.

I'll meet with each group one at a time.

User research findings due: describe your research methods, process, and findings. Based on your findings, describe your recommended design decisions.

WK09 WEDNESDAY 11/20

Time to work on your project.

Project group discussions.

I'll meet with each group one at a time.

WK09 FRIDAY 11/22

Time to work on your project.

Project group discussions.

I'll meet with each group one at a time.

WK10 MONDAY 11/25

(More information later)

WK10 WEDNESDAY 11/27 - No Class

Enjoy the holiday break.

WK10 FRIDAY 11/29 - No Class

Enjoy the holiday break.

WK11 MONDAY 12/02

Time to regroup and finalize your presentation.

WK11 WEDNESDAY 12/04 - Final project presentations**WK11 FRIDAY 12/06 - Final project presentations**

FINALS WK FRIDAY 12/13: Last call to turn things in.

Your community website and project report are due at the end of finals week. The project report should be at least 2000 words, document the design and research process involved in creating your community website, and should include citations from relevant readings (assigned or otherwise).