

CS 312 - Fall 2025 Syllabus

[Jump to Summary Schedule](#) | [Download printable PDF version](#)

Course Overview

Catalog Description: Laboratory work required. An in-depth introduction to the Internet and the World Wide Web for CS or similar majors as a basis for more advanced studies in Web programming. Topics include: historical and current development of the Internet Web document publishing. Internet design, communication, and application protocols and the tools that use them. Internet search tools and their design. Internet issues such as netiquette, copyright, spam, computer viruses, cookies, security, and future of the Internet.

Instructor Contact and Office Hours

Nasreen Arif: nasreen at cs.odu.edu, <https://www.cs.odu.edu/~narif>

Office hours will be held Monday through Thursday by appointment only. Please use the provided link to schedule your [appointment](#). All scheduled meetings will take place via Zoom. Once your appointment is confirmed, you will receive a Zoom link in the confirmation email

Course Objectives

After completing this course, you should be able to do the following:

- Describe the causes of Internet delay and loss.
- Use networking tools, such as ping and traceroute, to investigate a network.
- Explain what happens on the network when you click a link on a web page.
- Explain how an email message you send to a friend is sent and delivered.
- Avoid spam or phishing email traps.
- Explain the difference between a blog and a wiki.
- Describe how Google orders Internet search results.
- Construct a basic website using PHP, HTML, CSS, JavaScript, and SQL.
- Apply principles of security, internationalization, accessibility, and privacy.

Course Delivery Method

All sections of this course will be delivered via Zoom web conferencing. Course materials will be distributed via Canvas.

Class meetings will be held synchronously MW 9:30-10:15am via Zoom (see Canvas for Zoom meeting room). Attendance of the Zoom session during class meeting times is encouraged, but is not required. Recordings of the Zoom session will be available. All deadlines are based on the local timezone in Norfolk, VA

Requirements

Prerequisites

Prerequisites: The main prerequisite for this course is CS [252](#). I expect you to be familiar with the [ODU-CS Linux systems](#)

Textbook

The required textbook for this course is [Dynamic Web Programming and HTML5](#) by Paul S. Wang.

There will be other reading materials provided in Canvas.

Grading

Components

Your grade in this class will be based on the following components:

- Homework (25%): Individual homework assignments will reinforce topics covered in class and in the readings.
- Project (25%): Each student will develop an interactive website over the course of the semester.
- Exams (50%): A midterm exam will be given near the middle of the semester, and a final exam will be given during the final exam period.

Grading Scale

| percentage | letter |
|------------|--------|
| 93-100 | A |
| 90 - 92 | A- |
| 87 - 89 | B+ |
| 84 - 86 | B |
| 80 - 83 | B- |
| 77 - 79 | C+ |
| 73 - 76 | C |
| 70 - 72 | C- |
| 67 - 69 | D+ |
| 62 - 66 | D |
| 60 - 61 | D- |
| 0 - 59 | F |

Late Assignments

Any assignment submitted after its deadline is considered late. Late assignments lose 1 point for every 24 hours they are late. Submissions over 72 hours late are not accepted. This time limit includes weekends - they are counted just like weekdays. I reserve the right to specify that late submissions will not be accepted for particular assignments.

- 0-24 hours late: -1 point
- 25-48 hours late: -2 points
- 49-72 hours late: -3 points
- over 72 hours late: not accepted

Summary Schedule

Note: This schedule is tentative and subject to change throughout the semester. The full schedule, including assignments, is available [here](#), and all due dates will also be posted on Canvas.

Typical weekly schedule:

[ODU Fall 2025 academic schedule](#), [Final Exam Schedule](#)

| Week | Date | Topic |
|------|--------|---|
| 1 | Aug 25 | Introduction |
| | Aug 27 | Internet History and Internet Architecture |
| 2 | Sep 01 | <i>Labor Day Holiday</i> |
| | Sep 03 | Internet Protocols and Tools |
| 3 | Sep 08 | Web History and Architecture |
| | Sep 10 | Web Protocols and Tools |
| 4 | Sep 15 | HTML |
| | Sep 17 | CSS |
| 5 | Sep 22 | HTML Forms, HTML Authentication |
| | Sep 24 | PHP |
| 6 | Sep 29 | JavaScript |
| | Oct 01 | Ajax, Framework and JQuery |
| 7 | Oct 06 | Social Issues |
| | Oct 08 | <i>Project Work Day</i> |
| 8 | Oct 13 | <i>Fall Break</i> |
| | Oct 15 | Sessions and Cookies, State Management |
| 9 | Oct 20 | Midterm Review |
| | Oct 22 | <i>Midterm Exam Online (No class meeting)</i> |
| 10 | Oct 27 | Security and Threat Model |
| | Oct 29 | User Authentication |
| 11 | Nov 3 | Database Coding |
| | Nov 5 | Reliability |
| 12 | Nov 10 | Performance and Efficiency |
| | Nov 12 | Internationalization |
| 13 | Nov 17 | Accessibility |
| | Nov 19 | Cloud Computing |

| Week | Date | Topic |
|------|--------|-----------------------------|
| 14 | Nov 24 | <i>Project Work Day</i> |
| | Nov 26 | <i>Thanksgiving Holiday</i> |
| 15 | Dec 01 | Final Review Class |
| | Dec 03 | <i>No Class Meeting</i> |

Mon, Dec 8 – FINAL EXAM

Course Policies

Email/Canvas

Each student must check email and the class Canvas daily. You should use our class Canvas Discussion Board to ask and answer general course-related questions. I will use Canvas Announcements to notify you about important updates (assignment deadline changes, office hours cancellations, etc.).

Participation

Since this is an online class, it is essential that you regularly stay involved in class activities. This includes attending synchronous class meetings when possible, checking the class Canvas for announcements, submitting assignments on time.

Make-up Work

Make-ups for graded activities are possible only with a valid written medical or university excuse. It is the student's responsibility to give the instructor the written excuse and to arrange for any makeup work to be done. A makeup exam may be different (and possibly more difficult) than the regularly scheduled exam.

Disability Services

In compliance with PL94-142 and more recent federal legislation affirming the rights of disabled individuals, provisions will be made for students with special needs on an individual basis. The student must have been identified as special needs by the university and an appropriate letter must be provided to the course instructor. Provision will be made based upon written guidelines from the University's [Office of Educational Accessibility](#). All students are expected to fulfill all course requirements.

Students are encouraged to self-disclose disabilities that have been verified by the Office of Educational Accessibility by providing Accommodation Letters to their instructors early in the semester in order to start receiving accommodations. Accommodations will not be made until the Accommodation Letters are provided to instructors each semester.

Seeking Help

The course Canvas site should be your first reference for questions about the class. If you have questions about course requirements or materials, post questions using the class Canvas Discussion Board. For extra help, attend office hours.

Use of ChatGPT and other AI Tools

The use of ChatGPT or other AI tools is not permitted in this class. Remember that an essential part of being in school is to develop skills that you will need to be successful in the workplace. Using aids just to complete an assignment in the quest for high marks will not help you after you leave school.

This policy applies only for CS 312.

Academic Integrity

Old Dominion University is committed to students' personal and academic success. In order to achieve this vision, students, faculty, and staff work together to create an environment that provides the best opportunity for academic inquiry and learning. All students must be honest and forthright in their academic studies. Your work in this course and classroom behavior must align with the expectations outlined in the Code of Student Conduct, which can be found at <https://www.odu.edu/oscai>.

The following behaviors along with classroom disruptions violate this policy, corrupt the educational process, and will not be tolerated.

- Cheating: Using unauthorized assistance, materials, study aids, or other information in any academic exercise.
- Plagiarism: Using someone else's language, ideas, or other original material without acknowledging its source in any academic exercise.
- Fabrication: Inventing, altering or falsifying any data, citation or information in any academic exercise.
- Facilitation: Helping another student commit, or attempt to commit, any Academic Integrity violation, or failure to report suspected Academic Integrity violations to a faculty member.

In particular, submitting anything that is not your own work without proper attribution (giving credit to the original author) is plagiarism and is considered to be an academic integrity violation. It is not acceptable to copy source code or written work from any other source (including other students, online resources), unless explicitly allowed in the assignment statement. In cases where using resources such as the Internet is allowed, proper attribution must be given.

Any evidence of an academic integrity violation (cheating) will result in a 0 grade for the assignment/exam, and the incident will be submitted to the Department of Computer Science for further review. Note that academic integrity violations can result in a permanent notation being placed on the student's transcript or even expulsion from the University. Evidence of cheating may include a student being unable to satisfactorily answer questions asked by the instructor about a submitted solution. Cheating includes not only receiving unauthorized assistance, but also giving unauthorized assistance. For class files kept in Unix space, students are expected to use Unix file permission protections (chmod) to keep other students from accessing the files. Failure to adequately protect files may result in a student being held responsible for giving unauthorized assistance, even if not directly aware of it.

Students may still provide legitimate assistance to one another. You are encouraged to form study groups to discuss course topics. Students should avoid discussions of solutions to ongoing assignments and should not, under any circumstances, show or share code solutions for an ongoing assignment.

All students are responsible for knowing the rules. If you are unclear about whether a certain activity is allowed or not, please contact the instructor.

More information on academic integrity is available on the ODU [academic integrity page](#).

Statement from ODU Counseling Services

ODU's [Office of Counseling Services](#) is a university agency with competent, diverse, and multidisciplinary professional staff. We are committed to supporting the emotional well-being, social development, and academic progress of all students at Old Dominion University.

College life can be a wonderful time of self-discovery, but for many, it is also a time when the awareness of mental health conditions increases. OCS services are available to assist with addressing mental health concerns that a student may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via our website at <http://www.odu.edu/counselingservices>. All services are free to ODU students.