Computer Science 1000: Introduction to Computational Problem Solving

Goals: Introduction to Computational Problem Solving will provide a hands-on introduction to the three major areas of computer science: systems, theory, and applications. By the end of the class students should demonstrate (1) a working knowledge of imperative programming, specifically in-browser JavaScript (systems), (2) an ability to create and formally communicate systematic problem-solving strategies (theory), and (3) the use of such knowledge and skills to solve practical problems (applications).

Class: 8:35–9:50 AM, TR in Olin 132

Materials: Eloquent JavaScript: A Modern Introduction to Programming by Marijn Haverbeke, which is available in digital form at `http://eloquentjavascript.net/` or as a paperback from the bookstore.
Supplemental online resources, which will be linked from `https://github.com/nwu-computer-science-1000/materials`.

Instructor: Brady Garvin (bgarvin@nebrwesleyan.edu)

Office hours: 9:50–11:00 and 12:30–2:30, TR in Olin 132; 2:30–3:30, TR in Olin 105; or by appointment

Course Topics

- Problem Factoring

- Version Control

- Javascript Syntax

- HTML Syntax

- CSS Syntax

- The DOM

- Various Applications (by student choice)

Grading

Worksheets will account for 40% of your final grade, four unit tests will constitute 20%, three group projects will together be worth 30%, and the remaining 10% will depend on a cumulative final. Letters will be assigned at the end of the semester according to the percentage of possible points scored:

A^+	97–100	B^+	87–90	C^+	77–80	D^+	67–70	F	0–59
A	93–96	B	83–86	C	73–76	D	63–66		
A^-	90–92	B^-	80–82	C^-	70–72	D^-	60–62		

Most worksheets will be due at the beginning of class one week after we finish covering their content. We will usually have some in-class time for you to start them.

Projects will be due at the beginning of class roughly two weeks after they are assigned. More class time will be set aside for projects than for worksheets.

Accommodations

Nebraska Wesleyan University seeks to maintain a supportive academic environment for students with disabilities. To ensure their equal access to all educational programs, activities, and services, federal law requires that students with disabilities notify the university, provide documentation, and request reasonable accommodations. If you need accommodation in this course, please notify me so that I can verify that the required documentation is filed with the Academic Affairs Office and that your accommodation plan is in place. You should also meet with Prof. Sandy McBride, the Services for Students with Disabilities Coordinator (Old Main 309, 465-2346, smcbride@nebrwesleyan.edu).

Academic Integrity

Academic integrity is one of the basic principles of a university community. Nebraska Wesleyan University encourages and expects the highest standards of academic honesty from all students. The Student Code of Conduct states that "cheating, plagiarism, or other forms of academic dishonesty" are subject to disciplinary action. Refer to the Student Code of Conduct for additional information.

In this course you may work together to understand course concepts and assignments. But outside of your assigned group you may not develop joint solutions, share work, or copy anything, and you are responsible for safeguarding your own work. All external contributions must be acknowledged, including help from others and non-course materials such as websites. If in doubt, ask.

If you violate this policy, you will receive a failing grade in the course, and a report of academic dishonesty will be filed with the Registrar's Office.