CSCI 161: Computer Science I

Professor

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Thompson 390G
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Meetings

MWF 10:00-10:50 in Thompson 409, with labs Th 11:00-12:50 in Thompson 409. The final will be on Friday, December 20th at 8:00.

Course Description

Welcome to computer science!

CS I is the gateway to learning how to program. Every other computer science course starts here. This class lays the foundations for understanding logical programs and their applications in data mining, networking, artificial intelligence, computer gaming and graphics, biomedical informatics, and more. People who can program computers have a special ability. More than almost every other major here, computer science gives you a valuable skill, that will reward you long after you have graduated.

We will be using the Java programming language. Java is a modern, high-level language that is suitable for a wide variety of tasks. Almost anything that can be programmed, can be programmed in Java. It is also similar to many other programming languages, including C++, JavaScript, Perl, Python, PHP, C#, Go, and Ruby. The skills you learn here will be easily transferable to other languages.

Topics Covered/ Learning Outcomes

You will be able to understand, implement, and use the following aspects of Java:
- Elementary arithmetic and string manipulation.
- Conditional logic.
- Loops, including nested loops.
- Functions and methods.
- Debugging and programming practices.
- Arrays and basic data structures.
- Object-oriented programming.
- Basic graphics.

Web Page

The class web page is located at https://cs.pugetsound.edu/~aasmith/cs161/. Readings, assignments, links, and other valuable info are posted here.

Text

We will be using "JAVA: AN OPEN INTRODUCTION", by me. This is freely available to my students at https://openjava.pugetsound.edu/, but you will need to get the login credentials from me.

Prerequisites

You should already have had three years of high school math, or taken MATH 110.

Course Policies

There will be twelve assignments over the course of the class—usually one each week. You are free to talk to others in the class about them, but I expect what you finally turn in to be *100% your own work*. Assignments will be penalized when multiple students turn in the same code. They will also be penalized by 20% for each working day (or fraction thereof) they are late, down to 40%. However, you will have three "extension days" during the semester to extend a deadline by one working day. They will be used automatically, unless you specify otherwise.

Using online bots (such as ChatGPT) to generate code is strictly forbidden.

There will also be weekly lab assignments done in small groups. If your work compiles properly and appears to be a good-faith attempt, you will be given either 50% or 100%. Otherwise you will get 0%. You may keep trying so long as you have less than 100%. If you leave lab early, please show your work first.

Use of telephones without prior authorization is forbidden in class. Laptops or tablets may be used only in ways directly relevant to class. Anyone violating these rules will be asked to leave.

You all should be aware of the Honor Code at the college. Please do not cheat—it will not go well for you. *Any suspected cheating will be immediately reported.*

Exams are closed book, and will be cumulative. You are allowed a calculator (or your phone, so long as it is in "airplane mode") and one two-sided, letter-sized page of notes. They will be graded on a curve, with the highest score considered to be 100%.

Grading   Class work will count toward your final grades with the following weights:

Homeworks	Labs	Midterm 1	Midterm 2	Final
25%	10%	20%	20%	25%

Please be sure you do all the assignments, and on time. Missing even one can significantly impact your final grade. Also make sure that you understand the assignments—if you turn in code that you don't understand, you will likely do poorly on the exams and will struggle to pass the class.

Class participation and effort may help bump you up, if your final grade is borderline.

Final letter grades will be assigned as follows:

95%	90%	86⅔%	83⅓%	80%	76⅔%
A	A-	B+	B	B-	C+

73⅓%	70%	66⅔%	63⅓%	60%	Lower
C	C-	D+	D	D-	F

Attendance   I will not be keeping attendance (except on the first day). However, odds are that your attendance will correlate highly with your final grade.

Miscellany   If there are any special holy days that you will be taking off, please let me know as soon as you can so that we can work around them.

Please consider getting a flu shot. Influenza kills, and disease can spread rapidly in the dorms. (And you really don't want to miss a week of class. Trust me.)

Finally...if there's anything else I can do to help you, please let me know. I'm willing to go out of my way to make this a valuable class for you, but I can't do that unless you talk to me.

Mandatory UPS Boilerplate Syllabus Text

In their infinite wisdom, the lawyers and administrators that lead us have decreed that this text will be included in every class syllabus.

University, Academic, and Administrative Policies

There are many university policies and resources that offer guidance on how to be safe and make the most of your college education. Here are a few that you should take a moment to review:

- Please review university emergency preparedness, response procedures and a training video posted at `www.pugetsound.edu/emergency`.

- For information on academic and administrative policies (such as policies on grade policies, leaves of absence, declaring a major, academic integrity, and academic petitions) please refer to the Academic and Administrative Policies section of the University Bulletin located here: `pugetsound.edu/bulletin`.

- If you are seeking a religious accommodation in an academic course or program, please follow the process provided in the university's policy on Student Religious Accommodations in Academic Courses or Programs, available at `https://www.pugetsound.edu/office-university-counsel/policies/campuswide-policies/student-religious-accommodations-academic-courses-or-programs`.

- If you have any concerns about prohibited harassment or discrimination that may be affecting you or others at Puget Sound, please contact the university's Title IX Coordinator/Equal Opportunity Officer, Wheelock 218, 253.879.3793, website: `https://www.pugetsound.edu/title-ix-equal-opportunity`, email: `titleix-eoo@pugetsound.edu`. The Title IX Coordinator/Equal Opportunity Officer can explain available options and help address concerns informally or formally.

- If you have a physical, psychological, medical or learning disability that may impact you as a student at Puget Sound, please contact Student Accessibility and Accommodation, Howarth 105, 253.879.3399, website: `pugetsound.edu/saa`, email: `saa@pugetsound.edu`. They will determine with you what accommodations are necessary and appropriate.