

CSCI 261: Computer Science II

Professor	Adam A. Smith aasmith@pugetsound.edu http://cs.pugetsound.edu/~aasmith/	Thompson 390G Office MW 3-4, Tu 12-1 x3557
Meetings	MWF 11:00-11:50 in Thompson 399, with labs Tu 10:00-11:50 in Thompson 409. The final will be on Wednesday, May 1st at 12:00.	
Course Description	<p>And now we get serious.</p> <p>The main subject of CS II is the “data structure” (sometimes called an “object” or “complex data type”). It is a complicated, abstract collection of data that includes primitive data, specialized functions to work on that data, and other data structures. It lies at the core of what is known as “object-oriented programming”, which is <i>the</i> major paradigm of modern software development.</p> <p>We will be using the Java programming language (with which most of you are already familiar). 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, and C#. The skills you learn here will be easily transferable to them.</p> <p>The class will start with a review of Java and object-oriented programming. From there, we will cover many of the most common data structures used in modern programming. You will program many of these on your own, from scratch.</p>	
Topics Covered/ Learning Outcomes	You will be able to understand, implement, and use the following aspects of Java:	
	<ul style="list-style-type: none">• Object-oriented programming.• Recursion.• Memoization.• Sorting algorithms.• Stacks & queues.• Linked lists.• Search trees.• Hashing.	
Web Page	The class web page is located at https://cs.pugetsound.edu/~aasmith/cs261/ . Readings, assignments, links, and other valuable info are posted here.	
Text	We will be using my own textbook, “Java: an Open Introduction”. This will be available online to you for free, at https://openjava.pugetsound.edu/ . It will be supplemented by other readings.	
Prerequisites	You should already have taken CSCI 161, or its equivalent.	
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 <i>100% your own work</i> . Using online bots (such as ChatGPT) to generate code is forbidden. 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.	

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%

In particular, notice how heavily weighted assignments are. *Missing assignments is the easiest way to get a lower grade.* Please be sure you do them, and on time. In addition, 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%	86 $\frac{2}{3}$ %	83 $\frac{1}{3}$ %	80%	76 $\frac{2}{3}$ %
A	A-	B+	B	B-	C+
73 $\frac{1}{3}$ %	70%	66 $\frac{2}{3}$ %	63 $\frac{1}{3}$ %	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/.
- Protect yourself and others from COVID-19 by following our ongoing campus safety protocols, posted here: <https://www.pugetsound.edu/emergency/communicable-disease-outbreak-prevention/university-response-covid-19/protect-yourself/>.
- 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 University Bulletin located here: pugetsound.edu/sites/default/files/2023-08/AD23BULLETIN_online_Academic%20and%20Administrative%20Policies.pdf.
- 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-ooo@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.