

	CS 199	CS 161	CS 162
<b>Course Title</b>	Introduction to Programming and Problem Solving: A First Exploration	Introduction to Programming and Problem Solving	Introduction to Computer Science
<b>Who should take this class?</b>	<p><b>Any</b> of these statements are true:</p> <ul style="list-style-type: none"> <li>You have no programming experience.</li> <li>You want to explore Computer Science to see if you like it.</li> <li>You are not super confident in your math skills.</li> <li>You just want to take one class to learn some programming.</li> <li>You want a slower-paced learning environment for your first CS class.</li> </ul>	<p><b>All</b> of these statements are true:</p> <ol style="list-style-type: none"> <li>You have little to no prior programming experience.</li> <li>You are confident in your math skills.</li> <li>You are comfortable with a fast-paced learning environment.</li> </ol>	<p><b>All</b> of these statements are true:</p> <ol style="list-style-type: none"> <li>You have at least 10 weeks of experience writing complete programs independently in a high level programming language</li> <li>You can apply logicals, conditionals, loops, and arrays</li> <li>You can break problems into functions and implement those using arguments and returned values</li> <li>You have experience with arrays (or lists)</li> <li><i>You completed and passed the self-assessment</i></li> <li>You are ready to learn to work in a new environment (linux) while learning a new language (C++).</li> </ol>
<b>Programming Language</b>	JavaScript + Python	Python	C++
<b>Operating System for Coursework</b>	Mac / Windows / *nix / Chrome	Mac / Windows / *nix / Chrome	Linux
<b>Expected prior knowledge</b>	None.	<p>Math 111*</p> <p><i>*Please note that Math 111 is an imperfect way to assess the logical thinking and problem solving skills you will need in 161. Consider consulting professor Ely during his office hours if you are unsure.</i></p>	<p><i>A grade of C or better</i> in CS 161</p> <p>OR</p> <p><i>Equivalent</i> Programming Experience: This does <b>not</b> mean 'I picked up a few things on my own' — this is something more like 'I took AP CS and did well in it.'</p>

	<b>CS 199</b>	<b>CS 161</b>	<b>CS 162</b>
<b>How does this class fit into a CS major or minor?</b>	Lower division elective. After taking CS 199, if you want to pursue CS further, 161 is a great next step.	Lower division elective. If you do not pass with at least a C, then you are not ready for CS 162.	The first required course for both the major and minor.
<b>How often is this course taught?</b>	Every fall, winter, and spring quarter (currently no summer offering, but this may change if there is significant demand)	Every quarter, including summer.	Every quarter, including summer.

If you are not sure what the right place is for you, please reach out to one of the instructors:

CS 199: Ellie Harmon [ellie.harmon@pdx.edu](mailto:ellie.harmon@pdx.edu), FAB 120-15, office hours posted by door

CS 161: David Ely [ely@pdx.edu](mailto:ely@pdx.edu), FAB 120-17, office hours posted by door

CS 162: Karla Fant [karlaf@pdx.edu](mailto:karlaf@pdx.edu)

If you are struggling to decide between CS 199 and CS 161, you are encouraged to contact either instructor. We don't bite! And would be more than happy to help you find the right class for you.

Typically, CS 199 and CS 161 will be offered in the same time block to make it possible for you to switch between the two classes during the first 2 weeks of the quarter in case you realize after a few classes that you might be in the wrong place.