

This course is an introductory course that is intended for students that are already comfortable with programming basics and are looking to expand their knowledge with C++. The course will go over the syntax and concepts needed to program in C++ and will cover most of the textbook "The C++ Programming Language" by Bjarne Stroustrup. The class will start by going over basic syntax, types, and control flow. I/O operations are next, followed by arrays, pointers vs references, and dynamic memory management. Afterwards the C++ containers will be taught followed by structures and classes-- a large area that will include operator overloading, inheritance, exception handling, and polymorphism. The class will finish with a larger object oriented project to tie the concepts together.