

Department of Engineering Technology

ET580: Object-Oriented Programming in C++

Course Description

This course covers object-oriented algorithmic problem-solving using C++. Topics include pointers, pointer arithmetic; linked lists; memory management; recursion; operator overloading; inheritance and polymorphism; stream and file I/O; exception handling; templates and STL; applications of simple data structures and debugging techniques. Hands-on lab activities will complement the lecture topics.

Instructor

S. Trowbridge strowbridge@qcc.cuny.edu

Course Meeting (required for synchronous sections, optional for asynchronous sections)

Tuesdays: 4:10pm to 6pm on the course Zoom Server

Virtual Office Hours on Discord

Monday: 2pm to 4pm

Tuesday: 2pm to 4pm

Required Resources

Blackboard	access to asynchronous printed course content
YouTube	access to asynchronous video course content
Discord	synchronous voice/video/text chat support
Piazza	asynchronous homework/quiz support
Zoom	weekly synchronous question and answer meetings

Required Software

Atom Text Editor
GCC compiler

Optional References

1. Absolute C++ Sixth Edition by Walter Savitch, ISBN-13: 978-0133970784, ISBN-10: 0133970787
2. <https://www.learncpp.com>

Course Expectations

1. Watch all lecture, practice and algorithm videos for each topic by the topic deadline.
2. Code all practice, algorithm and homework problems with video assistance by the topic deadline.
3. Pass quizzes based upon lecture, practice, algorithm and homework problems by quiz deadlines.
4. Use Piazza and Discord to communicate with classmates for comprehension and extra credit.
5. Attend weekly Zoom meeting for synchronous sections (optional for asynchronous sections).

Grading Metric

Quizzes	due Fridays/Sundays	300 points
Extra Credit	Discord/Piazza activity	100 points
Semester Project	coding project submission	50 points
Final Examination		50 points
		500 total possible points

Homework is not graded directly, but solutions should be posted on Piazza by Sunday evening.

Final Grade is based upon the total earned points and scored as follows:

A	>= 400 pts.
A-	370-399 pts.
B+	330-369 pts.
B	300-329 pts.
B-	270-299 pts.
C+	230-269 pts. (minimum to transfer to most senior colleges)
C	200-229 pts.
C-	170-199 pts.
D-	150-169 pts. (minimum to pass)
F	0-149 pts.

QCC Academic Integrity Policy

Academic honesty is expected of all students. Any violation of academic integrity is taken extremely seriously. All assignments and projects must be the original work of the student or teammates. Plagiarism will not be tolerated. Any questions regarding academic integrity should be brought to the attention of the instructor. The following is the Queensborough Community College Policy on Academic Integrity: "It is the official policy of the College that all acts or attempted acts that are violations of Academic Integrity be reported to the Office of Student Affairs. At the faculty member's discretion and with the concurrence of the student or students involved, some cases though reported to the Office of Student Affairs may be resolved within the confines of the course and department. **The instructor has the authority to adjust the offender's grade as deemed appropriate, including assigning an F to the assignment or exercise or, in more serious cases, an F to the student for the entire course.**" The college's policy on Academic Integrity can be found at [Academic Integrity](#).

Examples of Plagiarism

1. Submission of copied content from a fellow student
2. Submission of copied content from the internet or a book
3. Sharing privileged course content online or otherwise (any and all course questions or solutions)

There are no group activities in this course. All submitted work must be 100% your own work.

Disabilities

Any student who feels that he or she may need an accommodation based upon the impact of a disability should contact the office of Services for Students with Disabilities in Science Building, Room S-132, 718-631-6257, to coordinate reasonable accommodations for students with documented disabilities. You can visit the [Services for Students with Disabilities](#) website.