



Cosc 2320: C++ Programming 2

Course Syllabus: Spring 2017

"Northeast Texas Community College exists to provide responsible, exemplary learning opportunities."

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	9:00 - 11:00 12:30 - 3:00	9:30 - 11:00	9:00 - 11:00 12:30 - 3:00	9:30 - 11:00	None	By Appointment

The information contained in this syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Catalog Course Description (include prerequisites):

This course is a continuation of COSC 1320 (C++ Programming I). The skills in problem solving and programming acquired in the previous class will be reinforced and enhanced. The concepts of object-oriented programming and design will be introduced. Specific topics include multi-dimension array processing and applications, sort and search algorithms, file processing, string processing, structures, classes, inheritance, pointer variables.

Required Textbook(s):

Author: Malik, D.S.

Title: C++ Programming: From Problem Analysis to Program (fourth edition and up is fine)

Publisher: Course Technology / Cengage

ISBN Number: 1-4239-0209-2

Supplies

1. Flash drive for file storage and transport
2. Paper and pen for taking notes

Resources

Computers and computer lab assistants are available in MS103. The LRC and the Academic Skills Center have computers available for students but with limited or no assistance. Printouts in the LRC cost \$0.10 a page. To print in any of the other locations, you must have a printing card appropriate for the place you are printing. (Printing cards are available in the NTCC bookstore and cost \$2.50 for 25 printouts \$0.10 per page). This course however will normally be submitting your work in electronic form through Blackboard.

Recommended Reading(s):

Any additional book or C++ resource.

Student Learning Outcomes:

1. Students will demonstrate an understanding of one-dimensional arrays.
2. Students will demonstrate an understanding of how to use sorting methods to rearrange data in an array.
3. Students will demonstrate an understanding of how to search an array using both linear and binary searching techniques.
4. Students will demonstrate an understanding of how to use a two dimensional array.
5. Students will demonstrate an understanding of how to construct and use a struct in C++.
6. Students will demonstrate an understanding of how to construct and use a class in C++.
7. Students will demonstrate an understanding of more advanced class related topics such as operator overloading and inheritance.

Exemplary Educational Objectives:

N/A

SCANS Skills:

C1, C5, C6, C7, C8, C9, C10, C11, C13, C15, C16, C17, C18, C19, C20, F1, F2, F3, F4, F5, F7, F8, F9, F10, F11, F12, F13, F16, F17

Lectures & Discussions:

Class sessions will consist of some lecture time and some lab time. Some assignments will be worked on together during class. However, you must find time outside of class to read the book and to complete the assignments.

Evaluation/Grading Policy:

Your grade for the course will be based on the following approximate numbers and percentages:

- 20% Exam 1
- 20% Exam 2
- 20% Final Exam
- 30% 4-5 Programs
- 10% Homework / Class Activities

Letter grades will be assigned according to the following scale:

- A at least 90% of the total points
- B at least 80% but less than 90% of the total points
- C at least 70% but less than 80% of the total points
- D at least 60% but less than 70% of the total points
- F less than 60% of the total points

You must earn an A on your own. Lower borderline grades may be affected by your class participation and behavior, the pattern of your grades, and the class grade distribution.

Drops: If you cannot complete the course, please don't forget to drop. If you are making an obvious effort in the course at the time you drop (still attending class, attempting program assignments), you may drop passing no matter what your actual grade might be. If you just disappear, your grade will be whatever you have actually earned at the end of the semester.

Tests/Exams:

Each exam will consist of a concepts section and a coding section. Students will be expected to do their own work on the exam.

Exams will be taken online. If the exam is missed, the student must contact the instructor to turn the exam back on. There should be a valid explanation for the absence and the instructor should be notified before the scheduled exam time if possible.

Assignments:

There may be some homework assignments such as textbook exercises. There will also be 4 - 6 programs assigned throughout the semester.

All work will be submitted through the Blackboard interface. Note the due dates of each assignment. Any assignment handed in late will be marked by Blackboard and may receive a 10% penalty for late submission. NO ASSIGNMENT WILL ACCEPTED MORE THAN A WEEK LATE.

Other Course Requirements:

A free Dev C++ compiler is available at <http://www.bloodshed.net>. I will give you more information on this later. The Orwell Dev C++ is an updated version of the Dev C++ compiler and is the best choice for Windows 8 and later operating systems.

Student Responsibilities/Expectations:

Students are expected to complete course work in an honest manner, using their intellects and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. NTCC upholds the highest standards of academic integrity. This course will follow the NTCC Academic Honesty policy stated in the Student Handbook. Students assume full responsibility for the content and integrity of the academic work they submit. The guiding principle of academic integrity shall be that a student's submitted work, examinations, reports, and projects must be that of the student's own work. Students shall be guilty of violating the honor code if they:

1. Represent the work of others as their own.
2. Use or obtain unauthorized assistance in any academic work.
3. Give unauthorized assistance to other students.
4. Modify, without instructor approval, an examination, paper, record, or report for the purpose of obtaining additional credit.
5. Misrepresent the content of submitted work.

The penalty for violating the honor code is severe. Any student violating the honor code is subject to receive a failing grade for the course and will be reported to the Office of Student Affairs. If a student is unclear about whether a particular situation may constitute an honor code violation, the student should meet with the instructor to discuss the situation.

For this class, it is permissible to assist classmates in general discussions of computing techniques. General advice and interaction are encouraged. Each person, however, must develop his or her own solutions to the assigned projects, assignments, and tasks. In other words, students may not "work together" on graded assignments. Such collaboration constitutes cheating. A student may not use or copy (by any means) another's work (or portions of it) and represent it as his/her own.

If the instructor receives two or more assignments which appear to be identical and the result of dishonesty, all parties involved will receive a zero on that assignment. Keep track of your work and do not share with others. If multiple events like this occur, the instructor reserves the right to award a failing grade for the course.

NTCC Academic Honesty Statement:

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Academic Ethics

The college expects all students to engage in academic pursuits in a manner that is beyond reproach. Students are expected to maintain complete honesty and integrity in their academic pursuit. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. Refer to the student handbook for more information on this subject.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to arrange an appointment with a College counselor to obtain a Request for Accommodations form. For more information, please refer to the NTCC Catalog or Student Handbook.

Family Educational Rights And Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Other Course Policies:

COURSE BEHAVIOR

Any acts of classroom disruption that go beyond the normal rights of students to question and discuss with instructors the educational process relative to subject content will not be tolerated, in accordance with the Academic Code of Conduct described in the Student Handbook.

ATTENDANCE

Students are expected to attend all class meetings. The student is responsible for obtaining material distributed on class days when he/she was absent. This can be done through contacting a classmate who

was present or by contacting the instructor during her office hours or other times. Contact your instructor by phone or email should you not be able to attend class. Please see the schedule of classes for the last day to withdraw. Religious Holy Days: please refer to the current Northeast Texas Community College Student Handbook.

ELECTRONIC DEVICES IN CLASS POLICY

Pagers, CD players, radios, and similar devices are prohibited in the classroom and laboratory facilities. Cell phones should be placed on vibrate in the classroom. In emergency situations, if not during lecture, the student may ask permission to step outside the classroom and take their calls. Text messaging during class is a distraction for the completion of work. The first time a student is caught interacting with the phone rather than working, the phone will be taken from them until the end of the period. After the second time, the student will be asked not to bring the cell phone to class. If these guidelines are not followed, further disciplinary action will be taken which could include reduction in overall grade. Reasonable laptop-size computers may be used in lecture for the purpose of taking notes or completing assignments.