CS 1410: Object-Oriented Programming

Spring 2016  M, W 7:30pm
Scott Grayston (sgrayston@weber.edu)

Textbook

Course Description
An introduction to the C++ language. Topics will include data types, control structures, functions, pointers, arrays, I/O streams, classes, objects, encapsulation, overloading, inheritance and use of these concepts in problem solving. Prerequisite: CS 1400.

Course Objective
1. Understand and program the basic constructs, data types, and components of the C++ language and use the language to solve a wide range of problems.
2. Understand the OO paradigm and how C++ supports and implements the specific features using the class construct.
3. Understand and operate a typical C++ Integrated Development Environment (IDE) and how to create, compile, execute and debug programs in that environment.
4. Understand and use effectively the basic data structures such as arrays and linked lists.
5. Understand the purpose of the STL and selected algorithms, containers and templates.

Instructor Contact Information
I do not have a permanent office on campus. Communication will need to be through Canvas messaging or my WSU email address (sgrayston@weber.edu). Allow a 24 hour turnaround time for responses. If you need to contact me immediately, call the CS department office. We will use Canvas for the class calendar, assignments, grades, and communication. I will use Canvas messaging and announcements to communicate with you and I would prefer that you message me through Canvas.

Grading Breakdown
Final grades will be calculated as a combination of the following:

- Assignments 50%
- Quizzes 10%
- Attendance 10% (25 max)
- Midterm Exam/Assignment 15% 10% - 5%
- Final Exam/Assignment 15% 10% - 5%

Grading Scale

- 94 and higher A
- 90 to 93 A-
- 87 to 89 B+
- 84 to 86 B
- 80 to 83 B-
- 77 to 79 C+
- Below 60 F

Tests
2/29 – Midterm Exam
4/27 – Final Exam

Lectures
We will cover one or more new chapters every week, except on exam and holiday weeks. The lecture schedule, including the chapters to be covered will be shown on the WSU Online Canvas calendar and is subject to change.
Quizzes
There will be a quiz given in class about every two weeks, except on exam and holiday weeks, and will cover information that we have discussed the previous weeks. Quizzes will generally be given on Mondays after the lecture in class. The quiz schedule will be shown on the WSU Online Canvas calendar and is subject to change.

Assignments
Assignments will be given weekly except on exam and holiday weeks. I plan to leave 30 to 45 minutes at the end of each class for lab time and questions. Also, feel free to message me if you have any questions. The assignments will be assigned and submitted using Canvas which will show the due date. You will submit a zip file that contains all source and header files. The name of the zip file should contain your name and the assignment number. You will have two weeks to submit each assignment from the date it is given. Late assignments will be accepted up to 3 weeks late at 50% value. The assignment schedule will also be shown on the WSU Online Canvas calendar.

Allocated Time
You should anticipate spending two to three hours of study per week for each credit hour for a University course. Computer and programming classes typically require time in the upper range. For this course expect 8 to 12 hour of study per week.

Cheating
CS Department policy dictates that any verifiable evidence of student academic cheating, as defined and determined by the instructor, will result in: 1) an automatic failing grade for the class and 2) a report to the Dean of Students that will include the student's name and a description of the student's dishonest conduct. The University affords you certain rights, including the right to challenge the accusation of cheating. The Dean of Students will explains these rights to you if you are accused of cheating.

The WSU Student Code explains:

A. Cheating, which includes but is not limited to:
   1. Copying from another student's test;
   2. Using materials during a test not authorized by the person giving the test;
   3. Collaborating with any other person during a test without authorization;
   4. Knowingly obtaining, using, buying, selling, transporting, or soliciting in whole or in part the contents of any test without authorization of the appropriate University official;
   5. Bribing any other person to obtain any test;
   6. Soliciting or receiving unauthorized information about any test;
   7. Substituting for another student or permitting any other person to substitute for oneself to take a test.
B. Plagiarism, which is the unacknowledged (uncited) use of any other person’s or group’s ideas or work. This includes purchased or borrowed papers;
C. Collusion, which is the unauthorized collaboration with another person in preparing work offered for credit;
D. Falsification, which is the intentional and unauthorized altering or inventing of any information or citation in an academic exercise, activity, or record-keeping process;
E. Giving, selling, or receiving unauthorized course or test information;
F. Using any unauthorized resource or aid in the preparation or completion of any course work, exercise, or activity;
G. Infringing on the copyright law of the United States which prohibits the making of reproductions of copyrighted material except under certain specified conditions.

Students with Disabilities
Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Services Center. SSD can also arrange to provide course materials (including the syllabus) in alternative formats if necessary."

For more information about the SSD contact them at 801-626-6413, ssd@weber.edu, or departments.weber.edu/ssd.

Come talk with me the first week of class.

Important Dates
1/18 - MLK Holiday (No Class)
2/15 - Presidents Day Holiday (No Class)
2/29 – Midterm Exam
3/14 thru 3/18 – Spring Break (No Class)
4/27 – Final Exam