

COP 3330

Object Oriented Programming in C++

Spring 2016 Syllabus

Instructor Information

Position	Name	E-mail	Office	Office hours
Course Instructor	Bob Myers	myers@cs.fsu.edu	LOV 105-C	Tues/Thurs 2:00 - 3:15 PM, Wed 5:15 - 6:15 PM
TA	James Bach	bach@cs.fsu.edu	MCH 102-D	Mon 12:00 - 1:30 PM, Thurs 12:30 - 2:00 PM
TA	Steven Rohr	rohr@cs.fsu.edu	Majors Lab	Mon 1:30 - 3:00 PM, Thurs 9:30 - 11:00 AM
TA	Robert Massicotte	rem12b@my.fsu.edu	MCH 101-A	Wed 3:00 - 4:30 PM, Fri 10:30 AM - 12:00 noon
TA	John Thrasher	wjt1321@my.fsu.edu	LOV 011	Tues 9:30 - 11:00 AM, Wed 1:00 - 2:30 PM
TA	Steven Williams	stwillia@cs.fsu.edu	MCH 102-C	Tues 12:00 - 1:30 PM, Wed 9:15 - 10:45 AM

Class Schedule

Main class

Sections	Room	Time
All	HCB 102	Tues/Thurs 3:35 - 4:50 PM

Recitation

Section	Room	Day	Time	Instructor
1	MCH 315A	Wed	11:15 AM - 12:05 PM	Williams
2	MCH 315A	Wed	12:20 - 1:10 PM	Bach
3	MCH 315A	Wed	1:25 - 2:15 PM	Bach
4	MCH 315A	Wed	2:30 - 3:20 PM	Rohr
5	MCH 315A	Wed	3:35 - 4:50 PM	Rohr
6	MCH 315A	Wed	5:15 - 6:30 PM	Massicotte

7	MCH 315A	Thurs	8:00 - 9:15 AM	Williams
8	MCH 315A	Thurs	9:30 - 10:45 AM	Thrasher
9	MCH 315A	Thurs	11:00 AM - 12:15 PM	Thrasher
10	MCH 315A	Wed	6:45 - 8:00 PM	Massicotte

Course Requirements:

Prerequisite Course

- A C- or better in COP 3014, or an equivalent introductory programming course

Course Website:

- <http://www.cs.fsu.edu/~myers/cop3330>

Textbooks:

- Absolute C++, 6th ed., Walter Savitch., Addison-Wesley
ISBN: 0133970787

Course Objectives:

Upon completion of the course, the student will:

- Understand the Object Oriented Programming concept and be able to discuss the differences between procedural and object oriented languages.
- Demonstrate the ability to create and use classes within the C++ programming language
- Demonstrate the ability to create, compile, and execute programs in multiple compiler environments (typically Microsoft Visual C++ and the GNU g++ compiler in unix) using the Object-Oriented design model.
- Be able to build C++ classes using appropriate encapsulation and design principles
- Demonstrate the use of arrays and pointers in the solution of programming problems using C++
- Be able to program using important C++ techniques, such as composition of objects, operator overloads, dynamic memory allocation, inheritance and polymorphism, file I/O, exception handling, templates, bitwise operations, preprocessor directives, and basic data structures.

Grading Policy:

The final course grade will be computed as follows:

Programs / Assignments	30 %
Test 1	20 %
Test 2	20 %
Final Exam	30 %

In addition to the scale listed above, in order to earn a C- or better in the course, a student is **required** to achieve a test average of C- or better. If the test average is below this level, the highest possible course grade is a D. The

test average can be computed with the following formula:

$$\text{TestAvg} = ((\text{Test1} * 20) + (\text{Test2} * 20) + (\text{FinalExam} * 30)) / 70$$

Students are also required to pass the ABET/SMALC program assessment instrument that is measured in this course. See ABET/SMALC Assessment section below.

Graduate students taking the course under a co-listed CGS 5xxx course number on S/U basis must earn a B- or better for a Satisfactory (S) grade.

Letter Grade Scale:

Letter	Numerical Average
A	92.00 - 100
A-	90.00 - 91.99
B+	88.00 - 89.99
B	82.00 - 87.99
B-	80.00 - 81.99
C+	78.00 - 79.99
C	72.00 - 77.99
C-	69.00 - 71.99
D	62.00 - 68.99
D-	60.00 - 61.99
F	0.00 - 59.99

Tests:

There will be three tests -- two term tests and a final exam. All exams are in the normally scheduled classroom. On-campus students will be required to bring and show your Student ID on test days. The final exam will be cumulative. The test formats will be a mixture of short-answer, code reading and understanding, and code writing. Tentative test dates are listed below. Be aware that these may change slightly depending on where we are in the course materials.

Test Dates: (Test 1 and 2 tentative)

Test 1	Thurs, Feb 11
Test 2	Tues, March 29
Final Exam	Fri, April 29, 3:00 - 5:00 PM

[Link to Spring 2016 Final Exam Schedule](#)

ABET/SMALC Assessment

This course is one of the Computer Science department courses designated for assessing certain student outcomes, required by SMALC/SACS and ABET for accreditation purposes. The specific outcome being

measured in this course is:

- Students will be able to construct computer software solutions for simple programming problems

This assessment will be done with 2 different programming assignments in the course, designated as such because they will incorporate multiple aspects of programming skills learned to date. They will be scored in several areas on a scale of values including "Ineffective", "Effective", and "Highly Effective". Each student must achieve an overall score of "Effective" or higher (Earning 70% of available assignment points will count as "Effective") on at least ONE of the two designated assignments. The assignment writeup for each will designate it as a programming assignment used to measure the ABET Outcome Assessment

Recitation / Quizzes

Periodic quizzes may be given, in lecture or in recitation class, to help students gauge their progress in the class, and to gauge attendance, if needed. No makeup quizzes will be given (no exceptions). Attendance and participation is expected, both in lecture and recitation class. There may also be some hand-in exercises done in recitation class. Any attendance grades, quiz grades, or graded work from recitation will count in the assignment average.

- Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Programming Assignments

- There will be a variety of homeworks and programming projects assigned. Some will be small and easy to complete in one sitting. Others will be larger programming projects. Assignment specifications will be posted on the web page.
- **Turn in all assignments on time!** Late assignments will be accepted one day after the due date, with the deduction of a letter grade (10%). Assignments more than a day late will not be accepted.
- **Compiling** -- Programs that do not compile are very tedious to grade, and they show a lack of testing, which is a large part of programming. There will be an automatic 5% point penalty for each compile error in a student's code that has to be fixed in the grading process. (This means that program submissions with compile errors will likely earn very little, if any, credit). Make sure your code compiles before you submit it!!!

Web References:

The course web page is your friend -- check it frequently! It will be continually updated with essential course materials, such as assignments, examples, and notes outlines. It will also include other helpful supplements, such as instructions for using the compilers, a FAQ (Frequently Asked Questions) page, suggested exercises, and other useful help materials. It is your responsibility to check the web page often for posted materials.

Miscellaneous Policies:

1. A student will be allowed to make up a missed test if he or she has a notice of illness from the Student Health Center or family physician. Any other excuses that are not medical or emergency related will be at the discretion of the instructor, and must be approved in advance. If you miss a test for any reason (without advance approval), you must notify me of the issue within 48 hours of the missed exam

2. Students in the class should have a computer account from the Computer Science Department (sign up for one if you don't already have one), and this can and should be used to store project files and access one of the compilers used in the course.
3. Please turn OFF all cellular phones, beepers, etc. in the classroom.

Academic Honor Policy:

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to “. . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University.” (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/Academics/Academic-Honor-Policy>.)

In addition to this information, please be aware of the following:

- Students are expected to do their **own** work on any classwork or test submitted for a grade (unless designated as a group assignment).
 - It is NOT appropriate to work on assignments with other students or to give or receive solutions to or from anyone before an assignment is due and handed in (by all parties).
 - Discussing solutions and techniques on assignments with other students **after** the assignment has been graded and handed back is okay, and encouraged.
 - When you turn in work with your name on it, you are representing that work as **your own**. If your submission matches that of another student, this is considered a **violation** of the Academic Honor Code.
- If a **group** project is given, then names of all group members would appear on the single program submission. This is appropriate
- Examples found in the course textbook may be used in programs, as long as the source is cited. This is appropriate, as some hand-in assignments may be based on program examples found in the book or contain other code that is provided to you in the assignment specification
- Do NOT post your assignment code solutions to publicly searchable web sites. This includes online compilers/version management systems that may auto-post your code in a publicly searchable way. If you do, somebody else may copy your solutions -- and you'll be on the hook for providing it to them! Use common sense!
- A first violation of the honor code will result, at **minimum** (but not limited to), a penalty of a 0 grade on the assignment or test involved, along with a reduced letter grade in the course.
- Any second violation of the honor code will result in an automatic F in the course, and possible proceedings before the Honor Court.

Americans With Disabilities Act

Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Student Disability Resource Center; and
- (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center
874 Traditions Way

108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
[\(850\) 644-9566](tel:(850)644-9566) (voice)
[\(850\) 644-8504](tel:(850)644-8504) (TDD)
sdrc@admin.fsu.edu
<http://www.disabilitycenter.fsu.edu/>

Students approved to take exams at the SDRC office are expected to take exams at the regularly scheduled time. Any exception to this will only be granted with a valid documented reason and must be approved by the instructor a week before the exam.

Syllabus Changes

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.