



COP 3514-001 - Program Design

Semester: Summer C

Meeting Times: MWF 12:30 pm to 1:45 pm

Meeting Place: SOC 149

Credit Hours: 3

CRN: 50207

Instructor Info

William Oropallo, Jr. (Ph.D Candidate)

Office Location: ENB 217

Office Hours: MW 2:00 pm to 3:00 pm or by appointment

Email: woropall@mail.usf.edu (please include "COP 3514" in the subject line)

College and Department: Engineering, Computer Science and Engineering

Description

From Oasis: The class examines the concepts involved in program design and creation and serves as an introduction to programming in the C programming language.

OBJECTIVES

To give a functional understanding of program design and C. Topics covered include, but are not limited to: C Fundamentals, Input/Output, Conditionals, Loops, Types, Arrays, Pointers, Strings, Structures, File Handling.

PREREQUISITES

Minimum Grade of B in Programming Concepts (COP 2510)

Textbook and Materials

C Programming: A Modern Approach by K. N. King, 2nd Edition, ISBN-10: 0393979504.
Material from much of the text will be covered.

Students will need access to a computer and compiler to write and run programs. I would suggest using GNU Compiler Collection (GCC), since that is what I will be compiling your programs on. This is a good source of info: http://en.wikibooks.org/wiki/C_Programming/What_you_need_before_you_can_learn. Here is a small tutorial on how compile (on Unix): <http://www.rc.usf.edu/tutorials/classes/tutorial/linux/chapter6.php> (just the part on GCC, 6.1.2). Any questions on installation and compiling are more than welcome. Feel free to email me or see me on office hours.

Mac OS X users can install GCC via source or packages from the internet, but I think the easiest way is to get the free Xcode download from the app store and install the command line developer tools. After Xcode is installed, typing "gcc" (no quotes) should show a prompt to install.

For Windows users, I have heard Minimalist GNU for Windows is a great tool. The information can be found here: <http://mingw.org>. As with Mac OS X, users can install GCC via source or packages from the internet as well.

For Linux users, they can install GCC via source or packages from the internet. I would suggest using the package manager for your system to install it.

Students may want a text editor to write code in. Typically it is a personal preference on what you will use. Though I cannot force you not to do so, I would suggest you do not use an IDE for this class. I think too much is hidden from the user and this can make things more confusing when you're learning. Some good command line text editors are Nano and Emacs. Some good GUI text editors are Notepad++ (Windows, <https://notepad-plus-plus.org/>) or Textmate 2 (OS X, <http://blog.macromates.com/2011/textmate-2-0-alpha/>)

Grade Components

The components of the course grade with their weights are:

Test 1 - 21% of grade

Test 2 - 21% of grade

Test 3 - 21% of grade

Homework - 21% of grade

Quizzes - 10% of grade

Presentation - 6% of grade

EXAMS

There will be three in-class tests. Each of these tests will be worth 21% of your course grade. Make-up exams will only be given for excused absences. Reasons for excused absences include documented illness, deaths in the immediate family and other documented crises, call to active military duty, court-imposed legal obligations (e.g., jury duty and subpoenas), religious days, special requirements of other courses and university sponsored events (e.g., performances, games/meets, judging trips, field trips), and severe weather conditions. Employment schedules, family reunions, vacations and athletic training/practice schedules of students do not comprise a valid excuse for absences.

Students must notify their instructors of scheduled absences (for approved reasons as noted above) at the beginning of each academic term. Pointing out specific conflicts with scheduled examinations or other scheduled assignments/activities should be part of this notification. In the event of an emergency unscheduled absence (as described above), students must contact their instructors as soon as possible and provide documentation if required. Extended illnesses may interfere with the satisfactory completion of courses, and in such cases a student should contact his or her college by the deadline to drop a course. After the drop deadline, students may submit an Academic Regulations Committee (ARC) petition with proper documentation to drop a course or withdraw for medical reasons.

Students may find additional information through their college ARC representative. An instructor may determine that missing a certain amount of participation-dependent activities (whether excused or not) precludes successful accomplishment of learning outcomes. In such cases the student is advised to withdraw from the course.

Hats which block students' eyes not permitted during exams. Clear water bottles must have all labels removed. Cell phones, and other manner of electronic gadgets are not permitted during exams. No calculators or notes are allowed during any exam. Exams will be written so that calculators will not be necessary.

Any exam not picked up within two weeks will be shredded. No corrections to exam grades will be considered unless the student has their exam. In the event of a score/grade dispute, this work must be available. Requests for consideration of score change must be made within one week of the day the exams are returned to the whole class, regardless if you were present are not (barring excused absences).

HOMEWORK

Seven homework assignments will be given over the course of the semester. Each homework will count for equal amounts and will give you a chance to write actual code. These assignments will correspond to the topics covered in class recently. Homework will be assigned and turned in via Canvas. You will have at least a week to complete each assignment. Each assignment will be worth a total of 30 points. Programs that do not compile will receive a grade of zero. Homework problems will also be announced at the time they are assigned.

In general late homework will not be accepted. You are expected to manage your time to work around your other classes and work. I expect students to first attempt the problems soon after they are assigned. I also expect students to pace themselves so that the homework is done on time. I understand that at times things get hectic and homework may slip; nonetheless, you are given more than ample time complete the homework.

Homework should be turned in with the file name Firstname_Lastname_HW#.c and a comment header that has your name, U-number, the homework, and the course number. In the case of multiple files, I will give further instruction. Here is an example:

File Name: william_oropallo_HW0.c

```
In the file:
/*
William Oropallo
U12345678
Homework 0
COP 3514
*/
```

QUIZZES

I will be giving quizzes over the course of the semester. These will be short problems or concepts that you should be able to complete in a very short amount of time at the end of a class. I will typically do this after we hit milestone topics in the class. You will not be able to make up quizzes, so attending every class is pertinent.

PRESENTATION

There will be one group project in which you will present a solution to a problem to the class. This presentation will be very short and is mostly designed to get you comfortable with the idea of speaking about your subject in front of a group.

FINAL GRADES

I will not assign +/- to any grades. See the USF Undergraduate Catalog. I reserve the right to exercise my discretion in rounding grades that lie very close to a grade cut-off. I have no quota or hidden agenda in determining grades. My primary consideration is your mastery of the material. At times such mastery is demonstrated in a manner that isn't graded. I will not use this discretion to lower anyone's score.

Your Responsibility

You will need to read each chapter before we cover it. In this course, you may have seen some of the concepts to be covered. I anticipate restating many basic definitions quickly. When necessary we will take time on a concept. We will work through some examples where applicable, but further practice will be left to homework.

Standard Policies

UNIVERSITY EMERGENCY POLICY

In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Blackboard, Elluminate, Skype, and email messaging and/or an alternate schedule. It's the responsibility of the student to monitor Blackboard site for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.

SPECIAL ACCOMMODATIONS

Students in need of academic accommodations for a disability may consult with the Office of Students with Disabilities Services (SVC1133) to arrange appropriate accommodations. Students are required to give reasonable notice prior to requesting an accommodation. Any student with a disability is encouraged to meet privately with the instructor during the first week of classes to discuss accommodations. The student must provide a current Memorandum of Accommodations from the Office of Student Disability Services (SVC 1133) when formally requesting accommodations. Exam accommodations through SDS usually require 5 (five) business days advance notice. Note: If you need extra time on

exams, you must make arrangements to take your exams with the SDS office. You cannot receive extra time if you choose to take your exams with the course instructor. See Student Responsibilities - [http:// www.asasd.usf.edu/students.asp](http://www.asasd.usf.edu/students.asp)

RELIGIOUS ACCOMMODATIONS

Students who anticipate the necessity of being absent due to the observation of a major religious holiday must provide notice of the date(s) in writing to the instructor by the third class meeting. USF Policy is posted at <http://generalcounsel.usf.edu/policies-and-procedures/pdfs/policy-10-045.pdf>.

FIRST WEEK ATTENDANCE

Per USF policy, first day attendance is mandatory. Students unable to attend must contact the instructor before class expressing their intention to remain in class. Otherwise, anyone not in attendance will be dropped from the course. Attendance will not count toward your grade. However, you are responsible for turning in homework, taking tests/quizzes, and learning material covered in the lecture.

DISRUPTIONS

The University policy on Disruption of Academic Process is explained in the Undergraduate Catalog. Please do not hold conversations, either with your classmates or your cell phones, during the lecture sessions. Please do not let texting or web surfing become disruptive to you or others.

ACADEMIC DISHONESTY

Cheating will not be tolerated. Instances of academic dishonesty including but not limited to: cheating, plagiarism, fabrication, forgery, complicity and computer misuse will not be tolerated. The university policy on Academic Integrity is explained in the undergraduate catalog: <http://www.ugs.usf.edu/policy/AcademicIntegrityOfStudents.pdf>

INCOMPLETE GRADE

An "I" grade indicates incomplete coursework and may be awarded to students. It may be awarded to an undergraduate student only when a small portion of the student's work is incomplete and only when the student is otherwise earning a passing grade (C or better). See full policy in the undergraduate catalog.

Tentative Schedule

Schedule is subject to change.

Monday	Wednesday	Friday
May 16th Chapters 1 - 3	May 18th Chapters 4 - 5 Homework 1 Assigned	May 20th Chapter 5 (Drop/Add Ends)
May 23rd Chapter 6	May 25th Chapter 7 - 8 Homework 2 Assigned	May 27th Chapter 9-10
May 30th NO SCHOOL	June 1st Chapter 10/Review	June 3rd Test 1
June 6th Chapter 11	June 8th Chapter 11 Homework 3 Assigned	June 10th Chapter 12 Assign Presentation
June 13th Chapter 12	June 15th Chapter 13 Homework 4 Assigned	June 17th Chapter 13/16
June 20th Chapter 16	June 22nd Review/Catch Up Homework 5 Assigned	June 24th Test 2
June 27th Project Presentations	June 29th Project Presentations	July 1st Chapter 15 (Withdraw Deadline)
July 4th NO SCHOOL	July 6th Chapter 17 Homework 6 Assigned	July 8th Chapter 17
July 11th Chapter 18	July 13th Chapter 22	July 15th Chapter 22 Homework 7 Assigned
July 18th Review/Catch Up	July 20th Test 3	July 22nd Wrap Up

