

Fall 2020 COP 2930 Syllabus

Special Topics: Introduction to Computing

Course Website: <http://www.cs.ucf.edu/~dmarino/ucf/cop2930/fall2020>

Course Prerequisites: No formal requirements

Lecturer: Arup Guha

Email: dmarino@cs.ucf.edu

Phone Number: 321-663-7749

Office Hours: TBA (Virtual) on Webcourses

Course Description: COP 2930 provides an introduction to the computing for those with *no prior programming experience*. The course aims to teach the following building blocks of algorithmic design: variables, arithmetic expressions, conditional statements, loops, functions, arrays, and strings, and how these constructs can be used to solve problems. In addition, students will learn about the various professions that use computing from practitioners in the field as well as the various majors that utilize computing from professors in those departments.

Note: No textbook is required for the course but a couple books are recommended below for those who prefer to have a book to follow:

Python for Everyone by Horstmann, Necaie, ISBN-13: 978-1119056553.

Think Python by Downey, ISBN 978-1491939369.

Grading Criteria

Component	Percentage of Total Grade
Individual Programming Assignments (12)	48% (4% each)
UCF Major Panel Reflection Paper	6%
Professional Panel Reflection Paper	6%
Midterm Exam	20%
Final Exam	20%

Individual Programming Assignments

The best way to learn the Spanish language, is to speak lots of Spanish. Thus, it's not too surprising that the best way to learn about programming and computing is to write computer programs. To that end, students will be given programming assignments during most weeks of the course. In other college courses students are given fewer longer programming assignments and naturally, students procrastinate and fall too far behind to catch up. By having students submit assignments weekly, I hope to identify students who need extra assistance more quickly. These assignments will be relatively short and the expectation is that students will solve them in at most two sittings. These are to be done individually. Help can only be obtained from me (Arup) or approved teaching assistants/tutors. Each of these will be turned in over Webcourses and the due dates will be specified in Webcourses. No late assignments will be accepted unless prior arrangements are made with the instructor.

UCF Major Panel Reflection Paper

One class meeting will be a panel meeting of UCF professors representing various departments that utilize computing. The first half of the panel will be moderated by the instructor, highlighting questions made by the instructor and the second half will consist of students asking the panel questions directly. After the panel, students will have a week to submit a 2-3 page paper, summarizing the panel discussion and their reflection on the panel's comments. **The panel meeting will be done completely remotely. Do NOT attend class physically on Tuesday, September 15, 2020. Instead, watch the panel on Zoom.**

Professional Panel Reflection Paper

One class meeting will be a panel meeting of professionals who use computing in their jobs. The first half of the panel will be moderated by the instructor, highlighting questions made by the instructor and the second half will consist of students asking the panel questions directly. After the panel, students will have a week to submit a 2-3 page paper, summarizing the panel discussion and their reflection on the panel's comments. **The panel meeting will be done completely remotely. Do NOT attend class physically on Tuesday, October 6, 2020. Instead, watch the panel on Zoom.**

Letter Grades

I use the information about assignment and exam averages and standard deviations, as well as my opinion of the difficulty of the assignments and exams to draw grading lines at the end of the semester. While this frustrates some students because they can not calculate what score they need on the final exam to earn a particular grade, it allows me flexibility to adjust for difficult assignments or exams. In addition, it motivates students to try their best on the final exam, since they don't have a pre-specified target to hit. When all students try their best, it allows me to accurately gauge students' progress. Last semester was my first teaching the course. For that class I used the following grade lines: A = 83%, B = 71%, B- = 66%, C = 54%, C- = 50%, D+ = 47%, D = 40%. With these grade lines, I gave 14 As, 6 Bs, 3 B-s, 5 Cs, 2 C-s, 1 D+, 1 D and 1 F. (Note: the students who got the D+, D and F did not take the final exam.)

Important Course Policies:

1) In order to take a make-up exam, you must request one from the instructor. Unless there are extenuating circumstances, requests must be made **prior** to the exam. Requests will only be granted in unusual circumstances such as family emergencies, medical emergencies, work trips, UCF club/team related trips and other circumstances beyond the student's control.

2) Both the course web page and Webcourses will be crucial elements of the course. ***It is your responsibility to check both of these before every class meeting for any updates that may be posted.*** Some clarifications may only be given in class and won't be posted online at all, so make sure you keep up with announcements in class.

COVID-19 Statement

Please read UCF's required statement about COVID-19 applicable to all syllabi this semester:

<https://fctl.ucf.edu/teaching-resources/course-design/syllabus-statements/>

I will record live lectures during each of the regularly scheduled class times. Most of these recordings will be made in our classroom, ENG2-102. Anyone is welcome to view the lecture from the comfort of their home or view the recording within 24 hours of when the live lecture is given. Since this class is supposed to be in person, **BUT** the COVID-19 cap is set at 35 students in our classroom, I have to limit in person attendance to once a week. To do this in a systematic way, we will follow this rule:

You may attend live on Tuesdays, if your last name starts with a letter from A - L.

You may attend live on Thursdays, if your last name starts with a letter from M - Z.

There are four scheduled class days where **NO ONE** will physically come to ENG2-102 due to logistics. These days are marked in the tentative schedule in **blue**. Both exams will be given completely remotely so that all 70 students can take the exam at the same time and in the same conditions (at home). Since we want to minimize the number of different people in the classroom, instead of having visitors come to the classroom physically for both panel discussions, I will run both panel discussions entirely remotely from home. This will inconvenience our volunteer speakers less.

All exams will be given in real time (during scheduled class times) as short timed assignments via Webcourses. These dates and times are posted on the syllabus and it is expected for students to take these quizzes and exams at the dates and times stated. These times are **NOT flexible**, like the lecture viewing times.

If you become ill during the semester and are unable to continue doing work in the class, please email me and we can decide together what the most appropriate action would be (make up assignments during the semester, regular withdrawal, medical withdrawal or incomplete). If you are ill but can still work from home, there is no need to let me know, unless you believe you need some special accommodation.

Academic Integrity Statement

Students should familiarize themselves with [UCF's Rules of Conduct](#). According to Section 1, "Academic Misconduct," students are prohibited from engaging in

Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.

Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather was obtained through someone else's efforts and used as part of an examination, course assignment, or project.

Commercial Use of Academic Material: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor's PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.

Falsifying or misrepresenting the student's own academic work.

Plagiarism: Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is the student's own.

Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.

Helping another violate academic behavior standards.

For more information about Academic Integrity, consult the [International Center for Academic Integrity](#).

For more information about plagiarism and misuse of sources, see "[Defining and Avoiding Plagiarism: The WPA Statement on Best Practices](#)".

Responses to Academic Dishonesty, Plagiarism, or Cheating

Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, The [Golden Rule](#): UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z.

Tentative Schedule

Week	Tuesday	Thursday	Sunday
Aug 24-30	Activity, First Program	Intro to Computer Science, Vars, I/O	Program 1: Live IDLE Check
Aug 31-Sept 6	Asgn Statement Formula Problems	Turtle!	Program 2
Sept 7-13	If Statement Random	Turtle if Activity	Program 3
Sept 14-20	UCF Major Panel Discussion	For Loop, Math Class	Major Panel Paper
Sept 21-27	For Examples Turtle Loops	While Loop While Examples	Program 4
Sept 28-Oct 4	Nested Loops	More Nested Loops	Program 5
Oct 5-11	Professional Panel Discussion	Midterm Exam	Prof. Panel Paper
Oct 12-16	Functions	Functions + Turtle	Program 6
Oct 19-23	Functions	Functions	Program 7
Oct 26-30	Lists in Python	List Examples	Program 8
Nov 2-6	Blackjack Example	pyGame Demo	Program 9
Nov 9-13	Strings	Dictionaries	Program 10
Nov 16-20	Input from Files	Output to Files	Program 11
Nov 23-29	File Demonstration	Thanksgiving Break	Program 12
Nov 30-Dec 4	Twython Demo	Final Exam Review	
Dec 7-13	Final Exam (10 am - 12:50 pm)		