COSC 1306 Computer Science and Programming

Course Syllabus - Fall 2019

Instructor: Daniel Biediger

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Course Number and Name: COSC 1306 — Computer Science and Programming

Section Number: 23841

Teaching Assistants:

Sara Bouhali – sarabouhali4@gmail.com
TBD - TBD

Michael Meskhi - mmekhedkin-meskhi@uh.edu
TBD - TBD

Class Schedule: Tuesday & Thursday 2:30 PM – 4:00 PM in PGH 232

Office Hours: Tuesday & Wednesday 1:00 PM – 2:00 PM in Fleming 021 and by appointment

Prerequisites: Math 1310 (College Algebra)

Attendance: Attendance is required. A portion of your grade will depend on your attendance to and participation in class. In addition, it is the easiest way to ask questions.

Course Textbook: *"Think Python, how to think like a computer scientist"* by Allen B. Downey, O'Reilly (Hard copy publisher), 2nd edition (Textbook Edition) which uses Python 3 (Software Version), free download in HTML or PDF at http://greenteapress.com/wp/think-python-2e/.

Learning Management Systems: We will be using Blackboard for homework and in-class assignment submissions, quizzes, and the lecture notes.

Course Description: COSC 1306 is an introduction to problem solving through computer programming. You will learn how to analyze computational problems, develop solutions to them as algorithms (or recipes) for a computer to follow, and implement the solution in a modern programming language -- Python. You will learn the fundamental principles of computer science, basic hardware and software components of a computer system, computational thinking, basic algorithms, and programming. You will get hands-on experience in problem solving by

designing, writing, testing and debugging Python programs. Regular course attendance is expected from all students as we will have many in-class activities and assignments.

Grading: Homework Programs [4+1] (20%); In class Assignments [~10] (20%); Quizzes [~10] (10%); Mid-term Exam (20%); Final Exam (30%);

Late assignments will not be accepted.

All requests for regrading and grade changes will be made to the instructor.

Exam Dates:

Mid-term Exam: October 17, 2019 2:30 PM – 4:00 PM

Final Exam: December 3, 2019 at 2:00 PM – 5:00 PM (Departmental Exam)

The nominal percentage-score-to-letter-grade conversion is as follows:

x >= 90	A
90 > x >= 86	A-
86 > x >= 82	B+
82 > x >= 78	B
78 > x >= 74	B-
74 > x >= 70	C+
70 > x >= 66	C
66 > x >= 62	C-
62 > x >= 58	D+
58 > x >= 54	D
54 > x >= 50	D-
x < 50	F

Course Limits on Grades

It is department policy, for all sections of COSC 1306 that:

"The Final grade you receive cannot be more than one (1) full grade higher than the **lower** of the grades in the EXAMS and ASSIGNMENTS components. That is, to receive a B- grade, you must have at least a C- in **both** the EXAMS component and the ASSIGNMENTS components."

Course Outline:

Topic 1 Introduction to Computers and Computing

Topic 2 Introduction to Python

Topic 3 Variables, Expressions and Statements in Python

Topic 4 Functions

Topic 5 Conditional Execution

Topic 6 Iteration and Loops

Topic 7 Strings

Topic 8 Lists

Topic 9 Files

Topic 10 Dictionaries

Topic 11 Tuples

Topic 12 Additional Python Topics and Case Studies

Course Policies:

Students are **strongly encouraged** to bring a functioning laptop computer to every class. The computer is for class-related activities, taking notes, and writing and executing programs. It is **NOT** for playing video games or doing other online activities. Students in violation of this policy will be asked to step out of the class. We will discuss how to install Python and any other essential software on your laptop the first week of the course.

There will be regular in-class assignments and/or quizzes. Completing these in a timely fashion contributes to the overall grade as stated above. Class is mandatory, and the in-class assignments will help us keep track of missing students. There may be weather or other exceptional circumstances preventing students from attending class. A small number of absences will not adversely impact your grade. I do not require or need notification of absences unless the absence will prevent you from taking an **exam**. It is each student's responsibility to read the appropriate book sections, and to catch up with any missed material. Students are required to behave in a courteous and ethical manner.

Cheating and Plagiarism:

Plagiarism, cheating, and other forms of academic dishonestly are strictly forbidden and can result in a failing grade in the course or a suspension from the academic program. Discussion of class topics, including homework assignments is encouraged. The copying of code or answers from other students or web-sources is strictly forbidden. Each student is expected to develop their own solution; collaborative coding efforts and sharing code are not allowed.

Students with Disabilities:

We will do our best to accommodate students with disabilities. Please be aware that students must provide the proper documentation from the Center for students with disabilities. The email contact for that office is uhcsd@central.uh.edu

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the "Let's Talk" program, a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html