COSC 1336 Computer Science and Programming
Course Syllabus
Spring 2023

Instructor: Stephen Huang (Office: PGH219, Email contact: shuang at cs.uh.edu)

Section: 13875

Class schedule: Monday and Wednesday (1:00 PM – 2:30 PM)

Classroom: PGH-232 (Change from SR2-130)

Office hours: **Monday** and **Wednesday**, 4:00-5:00 PM, in Person (preferred with priority) and via Zoom

Tuesday and **Thursday**, 2:00-3:00 PM, via Zoom only.

And by appointment (in person and via Zoom)

Office hours on Monday and Wednesday will be face-to-face in PGH-219 (primary) and on Zoom (if no students are waiting in person). Office hours on Tuesday and Thursday are online only. See Course Delivery below for a Zoom link. Students who want to discuss a personal issue should see the professor or make an appointment for a Zoom meeting.

Course Delivery: Unless otherwise announced by the university or the instructor, all classes will be **face-to-face** in the assigned classroom on campus. A Zoom link has been created for office hours and, in case there is a need, for lectures. Students should test the meeting link during the first week of the semester.

Zoom Link: https://uh-edu-cougarnet.zoom.us/j/94771401664 (updated on January 7, 2023). Students must be authenticated with their Cougarnet username.

Course Description: Overview of basic computer hardware and software concepts with design, analysis, and programming of efficient algorithms to solve computational problems. (from Course Catalog)

COSC 1336 is an introduction to problem-solving through computer programming. You will learn how to analyze computational problems, develop solutions to them as algorithms for a computer to follow to solve them and implement the solution in a modern programming language, specifically 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.

Prerequisites:	**MATH 1314** (College Algebra, formerly MATH 1310) or equivalent. A solid high school Mathematics and science background will be helpful in this course.
Core Category:	[90] Math/Reasoning
Course Website:	http://www2.cs.uh.edu/~acl/cs1336/
Expected Course Outcomes:	• Demonstrate a basic understanding of computer hardware and software. • Demonstrate skills in designing, coding, debugging, documenting, and executing programs. • Demonstrate problem-solving skills computationally. • Apply logical skills to programming in Python. • Write structured programs. • Use existing libraries or modules to solve problems.
Academic Honesty Policy:	Students must read and understand the Academic Honesty Policy in UH's Undergraduate Catalog. There will be no tolerance for academic dishonesty, and cheating can lead to a report of a violation of the Academic Honesty policy to the UH Office of Undergraduate Academic Affairs. **Sanctions** for confirmed violations of this policy may include, but are not limited to: a lowered grade, failure on the examination or assignment in question, failure in the course, probation, suspension, or expulsion from the University of Houston, or a combination of these. In the spirit of collegial and cooperative learning, you can discuss ideas and approaches with other students and implement the solution yourself. The key is to type and debug all the code you submit. In particular, it is inappropriate to email or share code phrases to be pasted in. Downloading solutions from the internet or asking other people to write the code for you are strictly prohibited. What you submit should be your work. Sharing your assignment or helping another student on an assignment is a violation of the honesty code. If you have a question about the policy, please ask the instructor. **Reporting obligation**: Students who believe they have observed an act of academic dishonesty should report the incident to the instructor as soon as possible.

Absence Policy:	Regular class attendance, participation, and engagement in coursework are essential contributors to student success. Absences may be excused as provided in the University of Houston Undergraduate Excused Absence Policy and Graduate Excused Absence Policy for reasons including medical illness of a student or close relative, death of a close family member, legal or government proceeding that a student is obligated to attend, recognized professional and educational activities where the student is presenting, and University-sponsored activity or athletic competition. Additional policies address absences related to [military service](), [religious holy days](), [pregnancy and related conditions](), and [disability]().
	Students are required to behave in a courteous, professional, and ethical manner.
Textbook:	We are committed to using open-resource textbooks that are free to students.
	Reference:
	• "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 in http://greenteapress.com/wp/think-python-2e/ (Green Tea Press).
	Also, almost all the slides used in class will be posted in PDF format on the course website. Slides are there so students can concentrate on the class without copying the slides. Note slides are not as organized and as detailed as a textbook.
	There are many documents available on the official Python website:
	• The Python Tutorial (https://docs.python.org/3/tutorial/). • The Python Standard Library Reference Manual describes the standard library distributed with Python (https://docs.python.org/3/library/index.html#library-index). • The Python Language Reference describes the exact syntax and semantics of the Python language (https://docs.python.org/3/reference/index.html#reference-index).
Computer	This course will be taught entirely face-to-face. However, students should have a desktop or laptop computer with a camera and microphone for online conferences available in case there is a need for online teaching. Students will also have to have Internet access at a reasonable speed. University Information Technology (UIT) has limited laptops available for student checkout. If you do not have a computer, you may check one out for use at home: UH [Laptop Checkout Requests]().

Tentative grading policy:	Two midterm tests (~20% each), a final exam (~30%), weekly quizzes (~10%), and about ten homework assignments (~20%). Attendance may be counted as part of the test or assignment grade.
Students with Disabilities:	The University of Houston complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for disabled students. In accordance with Section 504 and ADA guidelines, UH strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe you have a disability requiring an academic adjustment/auxiliary aid, please get in touch with the [Justin Dart, Jr., Student Accessibility Center](#).

Major Topics	Introduction to Computer Organization and Programming
	Computational Thinking
	Introduction to Python
	      Python Basic Syntax
	      Flow of Control
	      Functions
	      Strings
	      Lists
	      Files
	      Dictionaries
	Structured Programming

Syllabus Changes	Please note that the instructor may need to make modifications to the course syllabus and may do so at any time. Notice of such changes will be announced quickly through the course website or email.

The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course. Updated information will be posted on the course website.
Updated information may be found on the [course website](#).

Version Date: January 7, 2023.