COMP/IT 105: Introduction to Programming
Fall 2020

Instructor

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Course Information

COMP/IT 105, taught online, synchronously MW 12:00-1:15
Course web page: http://prof.msoltys.com/?page_id=5658
Office Hours M 1:15-3:00 on Zoom, or by appointment on Zoom.

Course Description

Provides a balanced view of computing and provides an introduction to the world of computer science. In depth coverage of the design, development, and expression of algorithms. Covers a variety of concepts relevant to the beginning student, including computer organization and design. We are going to use Python 3 programming language on the AWS Cloud9 platform. Students will receive AWS Educate accounts once classes start.
GenEd: B4 (*Math.-Quantitative Reasoning*), E (*Lifelong Learning and Self-Development*)

Prerequisite: College level mathematical maturity.

Student Learning Outcomes (SLOs)

Upon a successful completion of the course you will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions. (ABET SLO #1)

Textbook

Think Python First Edition, by Allen B. Downey, which can be downloaded for free from:
https://greenteapress.com/wp/think-python-2e/

Course Outline

Chapters below from the course textbook: *Think Python.*

Week	Dates	Chapter
1	Aug 24 – 28	AWS Educate and Cloud9 setup
2	Aug 31 – Sep 4	Chapter 1: The way of the program
3	Sep 7 – 11	Chapter 2: Variables, expressions and statements
4	Sep 14 – 18	Chapter 3: Functions
5	Sep 21 – 25	Chapter 5: Conditionals and recursion
6	Sep 28 – Oct 2	Chapter 6: Fruitful functions
7	Oct 5 – 9	Chapter 7: Iteration
8	Oct 12 – 16	Chapter 8: Strings
9	Oct 19 – 23	Chapter 10: Lists
10	Oct 26 – 30	Chapter 11: Dictionaries
11	Nov 2 – 6	Chapter 12: Tuples
12	Nov 9 – 13	Chapter 13: Files
13	Nov 16 – 20	Chapter 14: Classes
14	Nov 23 – 27	Chapter 15: Classes (Continued)
15	Nov 30 – Dec 5	Chapter 15: *Finishing touches & Course Review*

Grading

The course grade consists of 5 quizzes (25%), 5 assignments (25%), participation (20%), midterm (15%) and final exam (15%).

Grade determination

From	To	Letter Grade	From	To	Letter Grade
97	100	A +	77	79.99	C+
94	96.99	A	74	76.99	C
90	93.99	A-	70	73.99	C-
87	89.99	B+	67	69.99	D+
84	86.99	B	64	66.99	D
80	83.99	B-	60	63.99	D-
			0	59.99	F

Policies

1. **Academic Dishonesty:** By enrolling at CSU Channel Islands, students are responsible for upholding the University's policies and the Student Conduct Code. Academic integrity and scholarship are values of the institution that ensure respect for the academic reputation of the University, students, faculty, and staff. Cheating, plagiarism, unauthorized collaboration with another student, knowingly furnishing false information to the University, buying, selling or stealing any material for an examination, or substituting

for another person may be considered violations of the Student Conduct Code (located at http://www.csuci.edu/campuslife/student-conduct/academic-dishonesty.htm). If a student is found responsible for committing an act of academic dishonesty in this course, the student may receive academic penalties including a failing grade on an assignment or in the course, and a disciplinary referral will be made and submitted to the Dean of Students office. For additional information, please see the faculty (located at https://senate.csuci.edu/policies/2013-2014/sp-13-06-policy-on-academic-dishonesty-rev-oct2016.pdf), also in the CI Catalog.

2. **Disability Statement:** If you are a student with a disability requesting reasonable accommodations in this course, please visit Disability Accommodations and Support Services (DASS) located on the second floor of Arroyo Hall, or call 805-437-3331. All requests for reasonable accommodations require registration with DASS in advance of need: https://www.csuci.edu/dass/students/apply-for-services.htm. Faculty, students and DASS will work together regarding classroom accommodations. You are encouraged to discuss approved accommodations with your faculty.

3. **Course Policies Subject to Change:** It is the student's responsibility to check the course's web page frequently to stay abreast of the course, and for corrections or updates to the syllabus. Any changes will be posted there.

Course Assessment

Computer Science Student Learning Outcome (SLO) "1." states:

Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.

Here is the rubric for this outcome:

Performance Indicator	Unsatisfactory	Developing	Satisfactory	Exemplary
1. **Implement simple computer program**	no understanding of problem, no solution	problem understood, but solution wrong	problem understood and significant parts coded	problem understood and complete coded solution given
2. **Design simple algorithm for given problem**	no understanding of what is requested	understanding of problem but no algorithm given	understanding of problem and princiapl parts of algorithm presented	understanding of problem and a complete correct algorithm given
3. **Reason inductively and deductively**	no understanding of code	some understanding of code with comments	able to break code down to components and link together	complete understanding of code and critique of efficacy and argument for correctness

The threshold will be 80%, that is, at least 80% of students must meet the "satisfactory" or "exemplary" level. All three rows will be measured by the corresponding question on the final exam:

Implement simple computer program: A problem is posed, and the students must design a working program that solves it.

Design simple algorithm for given problem: A problem is posed, and an algorithm that solves it is produced, either in pseudo-code or in a standard programming language.

Reason inductively and deductively: A program is given, and the student is able to understand it, and critique it (in terms of efficacy or efficiency).