

ITSS 4381: Object-Oriented Programming with Python

Class Information

Class Time: 11:30am - 12:45pm Tuesday & Thursday

Class Location: JSOM 1.107

Office Hour: 4:00pm - 6:00pm Tuesday

Office Location: JSOM 14.315

Instructor Information

Instructor: Shuzhang Cai Email: shuzhang.cai@utdallas.edu

Please contact me at this email using your UT Dallas email address.

Class Description and Expectations

Students will learn the basics of Object-Oriented Programming (OOP) and how to use the OOP language Python.

Classes will include lessons and coding exercises to practice key programming skills and use common Python libraries.

Students will also learn simple ways to work with data using Python.

The very basic expectations for students are three-fold:

1. Participate in class discussion;
2. Practice coding after class;
3. Complete assignments, exams, projects on time.

Technical Requirements

Laptop (Windows or Mac OS) is REQUIRED for this course.

Install Python via Anaconda (<https://www.anaconda.com/>). Be sure to select Python version 3.7 (or higher).

Optional Materials

Python For Everybody - Charles R. Severance (<https://www.py4e.com/book>)

A Byte of Python (<https://python.swaroopch.com>)

Programming Python: Powerful Object-Oriented Programming 4th Edition

Grade Components

3 Programming Individual Assignments	$10 * 3 = 30$
Exam 1	20
Group Project (4 students in one group)	$25 = 15$ (Codes and Outputs) + 10 (The Presentation)
Exam 2	25
Bonus - Class Participation	$1 * 4 = 4$
Bonus - Watching Videos and Writing Reflections	$3 * 2 = 6$
Total	$100 + 10$

Grading Scale

Score Range	Letter Grade *
Above 92	A
88-92	A-
84-88	B+
80-84	B
76-80	B-
72-76	C+
68-72	C
64-68	C-
60-64	D
Below 60	F

* Subject to change based on the overall performance

Academic Calendar

Week 1 01/21 - 01/26	Introduction & Data Structures		
Week 2 01/27 - 02/02	String and List		Group Formation Due by Sunday
Week 3 02/03 - 02/09	List and Selection	Assignment 1 Release	
Week 4 02/10 - 02/16	Set, Tuple and Dictionary	Group Project Release	

Week 5 02/17 - 02/23	Loop		Assignment 1 Due by Sunday
Week 6 02/24 - 03/02	Exam 1 Review		
Week 7 03/03 - 03/09	Exam 1 (Classroom)	Assignment 2 Release	
Week 8 03/10 - 03/16	Function		
Week 9 03/17 - 03/23	No class: Spring break		Assignment 2 Due by Sunday
Week 10 03/24 - 03/30	Exception Handling, I/O		
Week 11 03/31 - 04/06	Object and Class	Assignment 3 Release	
Week 12 04/07 - 04/13	Inheritance		
Week 13 04/14 - 04/20	Python in Data Analytics		Assignment 3 Due by Sunday
Week 14 04/21 - 04/27	Group Project Presentation		Group Project Due by Sunday
Week 15 04/28 - 05/04	Exam 2 Review		
Week 16 05/05 - 05/11	Exam 2 (Classroom)		

Notes: All projects are due by 11:59 PM central time (CT). Please note that this is just a tentative class schedule; changes to the schedule will be posted in eLearning.

Assignment Guidelines

There will be 3 individual assignments during the semester. Students will be asked to write Python programs.

Submissions should be made on eLearning. Submissions by email are not accepted.

Late assignments within 24 hours will receive 80% of the points. Submissions between 24 and 48 hours will receive 60% of the points. Submissions later than 48 hours will receive no points.

Each student is expected to do the projects independently. Working on assignments together, copying another student's work, or having another person do your work is scholastic dishonesty and will be addressed via the academic dishonesty processes of the university.

No Generative AI in assignments.

Group Project Guidelines

The group project includes problems that students will solve via Python.

Submissions should be made on eLearning. Submissions by email are not accepted.

Late assignments within 24 hours will receive 80% of the points. Submissions between 24 and 48 hours will receive 60% of the points. Submissions later than 48 hours will receive no points.

Each group should consist of 4 students. All students in one group will get the same grade **unless someone does not contribute.**

No Generative AI in the group project.

Exam Guidelines

The exam is closed-book, closed-notes, and requires individual effort.

No make-up exams will be offered unless the student notifies the instructor before the scheduled exam date with valid reasons and necessary documentation.

Exam 2 will only cover the second half of the lectures.

Attendance

Attendance is not mandatory, but students who attend will receive **bonus points**.

Attendance will be checked 4 times throughout the course.

Videos & Reflections Assignment

Students can earn **bonus points** by completing this assignment. The course will provide five videos showcasing various applications of Python. You are expected to:

Select 2 videos from the 5 provided;

Watch the selected videos;

Write a reflection report about the following questions:

What is the video about? What do you learn from it? How does it relate to your past experiences or future aspirations?

The report should be approximately one page or around 300 words.

Academic Integrity

The University is committed to academic excellence and expects academic honesty from all members of the University and believes that it is essential for academic excellence and integrity.

Academic honesty includes adherence to guidelines established by the instructor in a particular course for both individual and group work.

It prohibits representing the work of others to be one's own (plagiarism); receiving unauthorized aid on an assignment (cheating); and using similar papers or other work products to fulfill the obligations of different classes without the instructor's permission.

Penalties for academic dishonesty may include a grade of “F” on the work in question or for the course. In addition, any student engaged in academic dishonesty will be subject to disciplinary action.

Please refer to Academic Dishonesty for more detailed information.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

“As a Comet, I pledge honesty, integrity, and service in all that I do.”

Academic Support Resources

The information contained in the following link lists the University’s academic support resources for all students.

Please go to Academic Support Resources webpage for these policies.