GBA 6070-P01 Programming Foundation for Business Analytics – Fall 2024

1. Instructor

Instructor: Dr. Mohammad Salehan

Office Hours: Tuesday & Thursday 11:00 am-12:00 pm and 2:00-3:00 pm or by appointment via Zoom.

E-mail: msalehan@cpp.edu (Use "GBA 6070" in subject line, spell your full name in email body, and send from your CPP email account or Canvas.)

Class website: Canvas (https://canvas.cpp.edu)

2. Class Meetings

Class time: Thursday 7:00 PM – 9:45 PM

Class location: Building 163 Room 1032

Zoom link for online biweekly class meetings (different than the link for office hours).

This is a hybrid class. We meet in person every other week and online on the alternating weeks. Each online meeting will be recorded and later uploaded to university's video streaming system for your reference. By attending the class, you consent to recording of your video and your voice during class meetings.

3. Learning Objectives

- Understand basic Python programming concepts such as data types, objects, and control statements.
- Be able to load and preprocess data using Python.
- Be able to visualize data using Python.

4. Textbook and Software

Required Textbook

1) Think Python. How to Think Like a Computer Scientist. by Allen Downey, Green Tea Press, 2nd edition. Available for free from https://greenteapress.com/wp/think-python-2e/
2) Python Data Science Handbook by Jake VanderPlas, O'REILLY publishing. Available for free from https://jakevdp.github.io/PythonDataScienceHandbook/

Required Software

- Anaconda (You can alternatively use Visual Studio Code or Google Colab if you have prior familiarity with those tools.)

5. Prerequisites

None

6. Student Responsibilities:

Each assignment will be posted on Canvas at least a week before its due date. All assignments are **individual** work. Peer discussion (for assignments) is allowed but plagiarism is not. Incomplete assignment will be accepted and graded. All assignments and projects submitted must be computer generated. Your submissions will be graded based on the correctness of your answer, following directions, and clearness in logic.

Each student is responsible for the successful completion and submission of all assignments and projects. Corrupted files or incomplete submission will not be credited. Students are also responsible for keeping a backup copy of each submission.

To ensure fairness, instructor will NOT review, debug, fix problems or provide direct answer to student assignments or projects BEFORE grading the entire class. They will, however, help students understand expectations, clarify requirements, provide guidance and examples, help students gain knowledge and skills needed.

Students must have spent significant and reasonable amount of time and effort researching and working on the issue on their own BEFORE asking for help.

Due dates: all assignments are due before the next class meeting unless otherwise specified.

Submission format: all assignments must be submitted as .ipynb notebooks, ensuring that all outputs are included.

Late assignments or projects: Please note that late assignments or projects will not be accepted. However, I will drop your lowest assignment grade to accommodate any unforeseen circumstances.

Make-up policy: There will be no make-up except for serious and compelling reasons that are substantiated with formal and authoritative documents.

7. What to expect from the instructor

Your success in this online course is partially dependent on regular communication between us. Email is my preferred method of contact. I will respond within 24 hours during the week. I will respond at my convenience during the weekend.

Students will receive feedback on online exams either immediately or once they are reviewed by the instructor (within 48 hours). Please allow one week to get feedback on graded assignments.

8. Grading

Grade	Percentage
A	93.00-100.00
A-	90.00-92.99
B+	87.00-89.99
B	83.00-86.99
B-	80.00-82.99
C+	77.00-79.99
C	73.00-76.99
C-	70.00-72.99
D+	67.00-69.99
D	63.00-66.99
D-	60.00-62.99
F	0-59.99

Assessment type	Percentage	Points
Assignments	50%	500
Midterm exam	25%	250
Final exam	25%	250
Total	100%	1000

Grading appeals

You may appeal your grade on any quiz and assignment **within three days** after the grade was posted. You may appeal your grade on the final project and the final exam **within one day** after the grade was posted. Any appeal must be computer generated and include the reason for the appeal and any sources that support your appeal.

9. Class participation

Regular class attendance is required. Participation points will be awarded on in-class pop quizzes. These points **cannot** be made up if you were not in class.

Cell phones

All cell phones are prohibited during exams. You may have cell phones in class when exams are not given, but they must be on mute and not answered until the end of the exam.

10. Code of conduct

The University has very clear guidelines for academic misconduct, and they will be enforced in this class. Academic dishonesty is a serious offence and includes:

1. All quizzes, exams, and projects are to present the individual effort of that student. While it is permitted to seek help in clarifying project requirements or related concepts, all materials submitted must present original work by each individual student. Copying of another student's work, allowing one's work to be copied, joint authorships, plagiarism, and, in general, claiming the work of another as one's own will result in a failing grade for the course and a report made to the Office of Judicial Affairs.
2. Cheating during exams – using unauthorized cheat sheets, copying from another, looking at another student's exam, opening books (during close-book exams), obtaining advance copies of exams, and having an exam re-graded after making changes.
3. Use of unauthorized study aids, such as cell phones, Internet, or any other materials prohibited by the instructor, during close-book exams.
4. You may use AI as a tutor, but submitting AI-generated code is not allowed. Make your best effort before seeking assistance from AI.

11. Student success

Cal Ploy Pomona, as a learning-centered university, is committed to student success. Students with disabilities are encouraged to contact me privately or the Disability Resource Center (909-869-3333, Building 9 Room 103) to coordinate course accommodations.

12. Tentative class schedule

Week	Date	Module	Topic	Class Mode	Book Chapters
0	8/22	1	Course Introduction Introduction to Python Programming Variables and Expressions	F2F	TP 1, 2
1	8/29	2	Functions	Online	TP 3, 6
2	9/5	3	Conditional Statements	F2F	TP 5
3	9/12	4	Iteration	Online	TP 7
4	9/19	5	Lists	F2F	TP 10
5	9/26	6	Strings, Dictionaries, Tuples	Online	TP 9, 11, 12
6	10/3	7	Classes and Objects	F2F	TP 15
7	10/10		Review	Online	TP 15
8	10/17		Midterm Exam	F2F	
9	10/24	8	Multidimensional Arrays	Online	PDSH 2
10	10/31	9	Data Frames	F2F	PDSH 3
11	11/7	9	Data Frames	Online	PDSH 3
12	11/14	10	Data Preprocessing	F2F	PDSH 3
13	11/21	11	Data Visualization	Online	PDSH 4
14	11/28		Holiday - Thanksgiving		
15	12/5		Review	F2F	
Finals	12/12		**Take home final exam due 12/12 7:00 PM**		