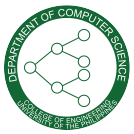

Department of Computer Science
College of Engineering
University of the Philippines
Diliman, Quezon City

COURSE NO. :	CS 11
COURSE TITLE :	Computer Programming I
COURSE CREDIT :	3 units
SEMESTER :	Second Semester, AY 2022-2023
SCHEDULE :	LEC 1/LAB 1 : Wednesdays, 10AM-12PM / Fridays, 10AM-1PM
	LEC 2/LAB 2 : Wednesdays, 7AM - 9AM / Fridays, 7-10AM
INSTRUCTOR :	Jozelle C. Addawe, AECH Room 201
EMAIL ADDRESS :	jcaddawe@up.edu.ph

COURSE DESCRIPTION

Basic Programming, Programming Constructs, Programming Logic

Course Outcomes: Upon completion of the course, students must be able to:

1. Demonstrate sufficient knowledge in programming
2. Describe in sufficient detail how programming constructs, variables, and input/output tools can be used to produce efficient programs
3. Implement computer programs
4. Program simple and complex algorithms to solve problems

COURSE OUTLINE

1. Computer Fundamentals
2. Introduction to Programming
   - Pseudocodes and Algorithms
   - Flowcharts
3. Programming Fundamentals
   - Introduction to Python Programming
   - Variable and Constants
   - Expressions and Statements
   - Input and Output
   - Basic Operations
4. Program Control Structures
   - Conditional Statements
   - Iterations, While-Loop and For-Loop
5. Lists and Tuples
6. String Manipulation

7. Functions and Modular Programming
8. Dictionaries
9. Program Debugging
10. File Processing
11. Special Topics
    - Data Processing in Python
    - Data Mining and Data Visualization in Python

SUGGESTED REFERENCE MATERIALS

1. Downey, Allen B.; Think Python: How to Think Like a Computer Scientist, 2nd Edition, http://greenteapress.com/wp/think-python-2e/
2. Other Python references (books or online resources)

GRADING SYSTEM

Course Requirements:
Weekly Machine Exercises - 40%
2 Machine Problems - 30% (15% each)
2 Long Exams - 30% (15% each)

GENERAL AVERAGE	PRE-FINAL GRADE
93 -100	1.00
88 - below 93	1.25
85 - below 88	1.50
82 - below 85	1.75
78 - below 82	2.00
74 - below 78	2.25
70 - below 74	2.50
65 - below 70	2.75
60 - below 65	3.00
below 60	5.00

CLASS POLICIES

- **Follow health protocols**. Wear your masks at all times.
- Attendance will be checked both for the lab and lecture classes. A student that reaches a **maximum of six (6) unexcused absences** will be forced to drop the course.
- Keep distractions at the minimum. **No using cellular phones while in class**. You may bring your laptop during the lecture hours but for the purpose of following through with the lessons. Laptops used in lecture class for non-class related purposes will be confiscated and returned after class hours.
- Consuming food and beverage inside the computer laboratories is not allowed.
- You may use your own laptop inside the computer laboratories, provided that you have installed the applications (text editor and compiler) needed for accomplishing the laboratory activities. However, make sure that you are seated in the permitted computer tables in the lab.
- Reach out when you need help.
- Leave the computer lab even more organized as you have found them.

- **Machine Exercises.** Specifications for weekly machine exercises (MEs) will be uploaded in UVLe and will be discussed during lab hours. Most of the Machine Exercises will be done via OJ (https://oj.dcs.upd.edu.ph/). Non-OJ MEs shall be uploaded on or before the indicated deadline. In case that UVLe is not accessible, non-OJ MEs shall be sent via email with an email subject **'[CS11] ME*xx*-Submission'** (example: [CS11] ME01-Submission).
- **Exams.** Long exams will be conducted face-to-face and individually. Each exam will be both written and hands-on programming.
- **Emails.** For any matters on CS 11, use the prefix **[CS 11]** for any CS11-related emails. Otherwise, emails might be missed and not properly addressed.
- **Announcements**. Announcements for the course shall be posted in the course's UVLe page.
- **Consultation.** If you wish to consult with your instructor, send an email a day prior to the day you wish to consult and wait for the confirmation for the schedule of consultation.
- **Academic Dishonesty.** Academic dishonesty will be subjected to proper disciplinary procedure, and the student/s involved (regardless of the source and receiver) will automatically be given a failed grade. Sharing of solutions on any requirement is not allowed. Algorithms, solutions and codes must be discussed within the group only for group activities. For individual activities, it is expected that the student will work on his or her own and will not discuss his/her solution to anyone. Violations of the above rules will be considered as academic dishonesty.