Department	International College of Liberal Arts		
Semester	Fall 2024	Year Offered (Odd/Even/Every Year)	Every Year
Course Number	DATA160		
Course Title	Coding Bootcamp: Python		
Prerequisites	DATA150 Introduction to Python Programming (can be taken concurrently)		
Course Instructor	PARIDA Abhishek	Year Available (Grade Level)	1
Subject Area	Interdisciplinary Data Science	Number of Credits	1
Class Style	Seminar	Language of instruction	English

(NOTE 1) Depending on the class size and the capacity of the facility, we may not be able to accommodate all students who wish to register for the course

Course Description	A coding boot camp is an activity-oriented training session designed to prepare students with practical problem-solving skills; the boot camp is spread across ten days, each covering a module. A module consists of specific Python exercises/ questions for the students to practice and implement. Completing each exercise will give them a better understanding of Python and programming in general. We focus extensively on Python essentials by building on the introductory Python course. Students begin by practicing problems and work their way to problem-solving in an algorithmic way. They are also introduced to many coding interview questions and practice OOP concepts. Students are motivated for G.U.I. or web development projects based on their capacity.
Class plan based on course evaluation from previous academic year	N/A

Course related to the instructor's practical experience (Summary of experience)	The instructor has extensive programming experience, which is evident in both professional work and research.
Learning Goals	Python is an extensive topic, and each student has a different learning curve, so we offer a Bootcamp to fulfill their programming needs. A coding boot camp is an activity-oriented training session designed to prepare students with practical problem-solving sessions.

iCLA Diploma Policy	DP1／DP2

iCLA Diploma Policy

(DP1) To Value Knowledge – Having high oral and written communication skills to be able to both comprehend and transfer knowledge

(DP2) To Be Able to Adapt to a Changing World – Having critical, creative, problem-solving, intercultural skills, global and independent mindset to adopt to a changing world

(DP3) To Believe in Collaboration – Having a disposition to work effectively and inclusively in teams

(DP4) To Act from a Sense of Personal and Social Responsibility – Having good ethical and moral values to make positive impacts in the world

Active Learning Methods	Problem-Based Learning／Workshop, Fieldwork
More details/supplemental information on Active Learning Methods	N/A
Use of ICT	N/A

Contents of class preparation and review	Students are advised to take handwritten notes; this will drastically increase their ability to retain the information. Further, they are expected to practice regularly. One to two hours of study is required before the class preparation, and an equal amount of practice is needed after each lecture.	Hours expected to be spent preparing for class (hours per week)	1 hours	Hours expected to be spent on class review (hours per week)	1 hours
Feedback Methods	The best way to correspond during the course is the UNIPA system or direct emails. Please check the UNIPA account regularly for updates related to classes. To have a better grade, be regular in the study, active and attentive in the class, do a revision of classwork regularly, and participate in-class quizzes.				

Grading Criteria		
Grading Methods	Grading Weights	Grading Content
Understanding of Concepts	25%	In-class Discussion, Classroom Exercises
Code Functionality	25%	In-class Discussion, Classroom Exercises
Timeliness	50%	In-class Discussion, Classroom Exercises

Required Textbook(s)	Eric Matthes- Python Crash Course: A Hands-On, Project-Based Introduction to Programming Al Sweigart- Automate the Boring Stuff with Python, 2nd Edition: Practical Programming for Total Beginners Zed Shaw- Learn Python 3 the Hard Way: A Very Simple Introduction to the Terrifyingly Beautiful World of Computers and Code Andrew Bird et al. The Python Workshop
Other Reading Materials/URL	N/A
Plagiarism Policy	Plagiarism is the dishonest presentation of others' work as if it were one's own. Duplicate submission is also treated as plagiarism. Depending on the nature of plagiarism, one may fail the assignment or the course. The repeated act of plagiarism will be reported to the University, which may apply additional penalties.

Other Additional Notes (Outline crucial policies and info not mentioned above)	N/A

(NOTE 2) Class schedule is subject to change

Class Schedule	
Class Number	Content
Class 1	Miscellaneous practice problems using Python
Class 2	Analysis of algorithms using Big-O notation
Class 3	Analysis of algorithms using Big-O notation
Class 4	Sorting and Searching algorithms
Class 5	Sorting and Searching algorithms
Class 6	Recursion

Class 7	Recursion
Class 8	Pandas
Class 9	Pandas
Class 10	Object Oriented Programming
Class 11	Object Oriented Programming
Class 12	Object Oriented Programming
Class 13	Object Oriented Programming
Class 14	Web Scraping using Beautifulsoup
Class 15	Web Scraping using Beautifulsoup