Department	International College of Liberal Arts		
Semester	Spring 2023	Year Offered (Odd/Even/Every Year)	Every Year
Course Number	DATA150		
Course Title	Introduction to Python Programming		
Prerequisites	None		
Course Instructor	PARIDA Abhishek	Year Available (Grade Level)	1
Subject Area	Data Science	Number of Credits	3
Class Style	Lecture	Class Methods	Face to face

(NOTE 1) Class Methods are subject to change

(NOTE 2) 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	This course introduces Python programming for students with little to no prior programming experience. The course covers essential concepts, syntax, and common usage of Python. The focus is on hands-on exercises to reinforce the learned concepts. The course is designed for liberal arts students who want to learn programming as a tool for creative expression, data analysis, or digital humanities. Students will be provided with assignments and in-class exercises to enhance their understanding of the concepts taught in class.
Class plan based on course evaluation from previous academic year	None
Course related to the instructor's practical experience (Summary of experience)	None
Learning Goals	This course aims to introduce students to the fundamentals of programming using the Python programming language. Upon completing this course, students will have a solid foundation in Python programming and be able to write basic programs to solve problems in various domains.

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	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.
Use of ICT in Class	None

Use of ICT outside Class	None
Expected study hours outside class	Expected study hours outside the class: A = Course credit: 3 B = Prescribed Class hours per credit: 20 C = Prescribed Total Study hours: 135 D = Total class hours: 60 (1 period of 75 minutes = 2 hours; A*B) Preparation and review hours: C − D = 75
Feedback Methods	The best way to correspond during the course is through 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 class, do a revision of classwork regularly, and participate in-class quizzes.

Grading Criteria		
Grading Methods	Grading Weights	Grading Content
Assignments	40%	
Quizes	60%	

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 (Refer to the URLs)
Other Reading Materials/URL	https://www.sicyon.com/resources/library/compute/Python_Crash_Course.pdf https://automatetheboringstuff.com/
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	None

(NOTE 3) Class schedule is subject to change

Class Schedule	
Class Number	Content
Class 1	Opening remarks and introduction to Python; Features of Python; Python philosophy; Why study Python?; Python Installation
Class 2	Python Basics: Arithmetic in Python; Variables and Strings, Expressions and Statements
Class 3	Variables; User input; f-string, Strings
Class 4	Booleans; Operators
Class 5	Python containers: Lists; Python loops: for; while
Class 6	Practice exercises
Class 7	Practice exercises
Class 8	Practice exercises

Class 9	Practice exercises
Class 10	Practice exercises
Class 11	Practice exercises
Class 12	Practice exercises
Class 13	Python containers: Lists; Tuples; Sets; Dictionaries
Class 14	Practice exercises
Class 15	Comprehensions; Functions
Class 16	Practice exercises

Class 17	Practice exercises
Class 18	Practice exercises
Class 19	Lambda function; Map; Filter; Reduce; Zip
Class 20	Practice exercises
Class 21	Exceptions
Class 22	Practice exercises
Class 23	Numpy; Matplotlib
Class 24	Practice exercises

Class 25	Pandas
Class 26	Practice exercises
Class 27	Practice exercises
Class 28	Practice exercises
Class 29	Practice exercises
Class 30	Practice exercises