

Department	International College of Liberal Arts		
Semester	Fall 2023	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	Data Science	Number of Credits	1
Class Style	Seminar	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	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	None
Course related to the instructor's practical experience (Summary of experience)	None
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
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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	None
Use of ICT in Class	None
Use of ICT outside Class	None

Expected study hours outside class	A = Course credit: 1 B = Prescribed Class hours per credit: 40 C = Prescribed Total Study hours: 45*A = 45 D = Total class hours: 40 (1 period of 75 minutes = 2 hours: A*B) Preparation and review hours: C - D = 5
Feedback Methods	Every day, students will be assigned programming tasks and exercises covering various topics. They are expected to complete these assignments by the end of the day and submit their work for review. Written feedback will be provided to students on their submitted work.

Grading Criteria		
Grading Methods	Grading Weights	Grading Content
In class assignment exercise	100%	

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	None
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	Day 1 Miscellaneous practice problems
Class 2	Day 1 Miscellaneous practice problems
Class 3	Day 2 Miscellaneous practice problems
Class 4	Day 2 Miscellaneous practice problems

Class 5	Day 3 Analysis of algorithms using Big-0 notation
Class 6	Day 3 Analysis of algorithms using Big-0 notation
Class 7	Day 4 Practice problems on Big-0 notation
Class 8	Day 4 Practice problems on Big-0 notation
Class 9	Day 5 Recursion
Class 10	Day 5 Recursion
Class 11	Day 6 Sorting and Searching Algorithms
Class 12	Day 6 Sorting and Searching Algorithms
Class 13	Day 7 Descriptive Statistics
Class 14	Day 7 Descriptive Statistics
Class 15	Day 8 Object Oriented Programming
Class 16	Day 8 Object Oriented Programming
Class 17	Day 8 Object Oriented Programming
Class 18	Day 8 Object Oriented Programming
Class 19	Day 10 Web Scraping using BeautifulSoup
Class 20	Day 10 Web Scraping using BeautifulSoup