

Course Description Form: Programming Fundamentals

Course name:					
Programming Fundamentals					
Course code:					
fghj					
Semester / Year:					
2026-2027					
Date of preparation of this description:					
15/10/2026					
Available forms of attendance:					
In-person + online (when needed)					
Total number of study hours / total number of units:					
2 hours / 2 units					
Name of course coordinator					
Name: Asst. Lecturer Abbas Asim Mutashar Email: abbas.asim@uowa.edu.iq					
Course objectives					
When it comes to programming, the goals are simple: to make things faster, easier, and more efficient. But how these goals are achieved can vary greatly depending on the application. A programmer may want to create a new software application to speed up a process or make it easier to use. On the one hand on the other hand, they may be working to make an existing program run faster or use less memory. Ultimately, the goal of programming is to make our lives easier by automating tasks or solving problems in new and innovative ways. And as technology advances, the possibilities of what we can achieve with code are endless. Learning about hardware (HW) and software (SW) components and the role of programming languages in them Learning the principles of programming in Python Learning how to write programs in Python				Objectives of the course subject	
77. Teaching and learning strategies					
.Theoretical lectures supported by applied examples ✓ .Class discussions and analysis of real case studies ✓ .Applied projects (reports and short research papers) ✓ .Training in using quantitative methods for forecasting and decision-making ✓ .E-learning through digital resources and educational videos ✓					Strategy
78. Course structure					
Assessment method	Learning method	Unit or topic name	Required learning outcomes	Hours	Week
Oral questions	Lecture + discussion	Programming Fundamentals	Introduction to programming fundamentals	2	1
Short quiz	Lecture + examples	Multiple programming languages	The most popular programming languages that can be learned easily	2	2
Short report	Lecture + participation	=	=	2	3

Assignment	Lecture + discussion	=	=	2	4
Assignment	Lecture + exercise	Web development	Web development	2	5
Short quiz	Lecture + case study	Game development	Game development	2	6
Assignment	Lecture + training	Mobile application development	Mobile application development	2	7
Monthly test	Lecture + practical exercise	Windows application development	Windows application development	2	8
Short report	Lecture + discussion	=	=	2	9
Assignment	Lecture + practical examples	Artificial intelligence and machine learning	Artificial intelligence and machine learning	2	10
Short quiz	Lecture + training	How to learn programming fundamentals	How to learn programming fundamentals	2	11
Assignment	Lecture + case study	Learning the details of the Python programming language	Learning the details of the Python programming language	2	12
Report	Lecture + training	How to write in Python	How to write in Python	2	13
Class participation	Review + exercises	Writing comments in Python	Writing comments in Python	2	14
Final exam	Written	Exam	Final test	2	15
Short report	Lecture + examples	Input and output operations in Python	Input and output operations in Python	2	16
Assignment	Lecture + participation	Variables in Python	Variables in Python	2	17
Assignment	Lecture + discussion	Explaining data types in Python	Explaining data types in Python	2	18
Short quiz	Lecture + exercise	Functions in Python	Functions in Python	2	19
Assignment	Lecture + case study	=	=	2	20
Monthly test	Lecture + training	=	=	2	21
Short report	Lecture + practical exercise	Boolean values in Python	Boolean values in Python	2	22
Assignment	Lecture + discussion	Sequences and arrays in Python	Sequences and arrays in Python	2	23
Short quiz	Lecture + practical examples	How to create a dictionary in Python	How to create a dictionary in Python	2	24
Assignment	Lecture + training	=	=	2	25
Report	Lecture + case study	The binary function in Python	The binary function in Python	2	26
Class participation	Lecture + training	Operations in Python	Operations in Python	2	27
Short report	Review + exercises	Making choices and decisions in Python	Making choices and decisions in Python	2	28
Assignment	Lecture + examples	The loop in Python and exceptions in Python	The loop in Python and exceptions in Python	2	29
Final exam	Written	Exam	Final test	2	30

79. Course evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily and oral exams, monthly and written exams, reports, etc.

Preparation and class participation: 10 marks .ذ

Monthly test: 30 marks .ض

Final exam: 60 marks .ظ

Total = 100 marks .غ

80. Learning and teaching resources

Book: Learn Python for Beginners by Hadeel M. Taher

Required textbooks

Guttag, J. V. (2013). Introduction to computation and .A programming using Python. Mit Press

Main references

Summerfield, M. (2010). Programming in Python 3: a complete introduction to the Python language. Addison-Wesley Professional.	Recommended supporting books and references
https://blog.mostaql.com/programming-basics-for-begginers/	Electronic references, internet websites