Jordan University of Science and Technology
Faculty of Computer & Information Technology
Internet Of Things Department

IOT210 Iots Programming - JNQF Level: 7

First Semester 2025-2026

Course Catalog
2 Credit Hours. This course introduces students to programming and problem-solving using the Python programming language, with a focus on its applications in IoT (Internet of Things). Topics include data types, procedures and functions, conditional statements, looping, lists, exception handling, and file handling. Students will learn how to write efficient Python programs, interact with sensors and devices, and develop foundational coding skills essential for IoT applications.
Teaching Method: On Campus

Text Book	
Title	Introduction to Python Programming and Data Structures, 20233
Author(s)	Y. Daniel Liang
Edition	3rd Edition
Short Name	Textbook
Other Information	

Instructor	
Name	**Dr. Assem Bsoul**
Office Location	C1 L-3
Office Hours	Sun : 12:00 - 13:00 Tue : 10:00 - 11:00 Wed : 09:00 - 10:00 Thu : 10:00 - 11:00 Thu : 12:00 - 14:00
Email	aabsoul8@just.edu.jo

Class Schedule & Room

Section 1:
Lecture Time: Sun, Thu : 11:00 - 12:00
Room: M3303

Prerequisites		
Line Number	**Course Name**	**Prerequisite Type**
8210111	HSS101CS Introduction To Programming	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	**Topic**	**References**
Week 1	Introduction to Computers, Programs, and Python	**Chapter 1** From **Textbook**
Week 2	Basic Programming	**Chapter 2** From **Textbook**
Weeks 3, 4	Selections	**Chapter 3** From **Textbook**
Weeks 5, 6	Mathematical Functions, Strings, and Objects	**Chapter 4** From **Textbook**
Weeks 7, 8	Loops	**Chapter 5** From **Textbook**
Weeks 9, 10	Functions	**Chapter 6** From **Textbook**
Weeks 11, 12	Lists	**Chapter 7** From **Textbook**
Weeks 13, 14	Multidimensional Lists, Tuples, Sets, and Dictionaries	**Chapter 8 & Chapter 14** From **Textbook**
Week 15	Files and Exception Handling	**Chapter 13** From **Textbook**

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Students will write, trace, and debug Python programs that apply core constructs - variables, selections, loops, functions, and basic data structures - to analyze problem requirements and produce correct behavior. [1SO1] [1L7K1]	25%	
Students will design and implement modular Python solutions that use files and exception handling; test with representative cases and evaluate correctness and robustness against stated requirements. [1SO2] [1L7S1]	25%	
Students will construct programs that use strings, lists, tuples, sets, and dictionaries; optionally abstract behavior with simple classes or GUIs; refactor and justify choices for readability, efficiency, and maintainability. [1SO6] [1L7S3]	25%	
Students will document code (style, comments, docstrings) and communicate program intent and results in concise technical form; collaborate using basic team practices; recognize and follow ethical/academic-integrity expectations in programming work. [1SO5] [1L7C3]	25%	

Relationship to Program Student Outcomes (Out of 100%)					
SO1	SO2	SO3	SO4	SO5	SO6
25	25			25	25

Relationship to NQF Outcomes (Out of 100%)			
L7K1	L7S1	L7S3	L7C3
25	25	25	25

Evaluation	
Assessment Tool	**Weight**
First	25%
Second	25%
Final	40%
Coursework	10%

Policy	
Attendance	Excellent attendance is expected. In accordance with university regulations, students missing more than 20% of total classes are subject to failure. No excuses will be accepted. If you miss a class, it is your responsibility to find out about any announcements or assignments you may have missed. Attendance will be recorded at the beginning or end of each class.
Exams	All exams will be CLOSE-BOOK. The format for the exams is generally as follows: multiple-choice, short answers, coding questions.
Makeup Exams	Makeup exam should not be given unless there is a valid excuse according to JUST policy. Arrangements to take an exam at a time different than the one scheduled MUST be made prior to the scheduled exam time. In accordance with university regulations, students should bring a valid excuse authenticated through valid channels in JUST.
Code of Conduct	Exams, quizzes, assignments, homework, projects, lab work, and any graded course activity need to be done individually and your original work unless specified by the instructor. Using AI tools is not permitted and considered cheating unless specified by the instructor. Copying someone else?s work, even if changes are subsequently made, is inappropriate, and such work will not be accepted. Cheating or copying in exams is an illegal and unethical activity and standard JUST policy will be applied. Students are expected to act professionally with high morals amongst themselves and with the instructors. JUST policies apply.

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