TISHK INTERNATIONAL UNIVERSITY
FACULTY OF APPLIED SCIENCE
Department of INFORMATION TECHNOLOGY,
2025-2026 Spring
Course Information for IT 118 PROGRAMMING II

Course Name:	PROGRAMMING II

Code	Regular Semester	Theoretical	Practical	Credits	ECTS
IT 118	2	3	2	4	6

Name of Lecturer(s):	Islam Abdulaziz
Teaching Assistant:	Hemin Mikael and Muhammad Kamal
Course Language:	English
Course Type:	Main
Office Hours	Thursday (9:00 AM-11:00 AM)
Contact Email:	islam.abdulaziz@tiu.edu.iq Tel:07504649642
Teacher's academic profile:	MSc
Course Objectives:	This course will teach students to: Experience problem solving skills through the use of the C++ Programming language. Learn and apply the basics about C++ programming language such as variables, data types, arrays, pointers, functions and file stream. Write and read C++ code. Isolate and fix common errors in C++ programs. Design and write their own basic projects which composed of more than 100 lines of code and solve simple real life problems.
Course Description (Course overview):	The objective of this course is to develop a basic understanding of programming concepts and using these programming concepts in C++ language. Structured programming concept is introduced. Programming constructs such as sequential structures, selection structures, and repetition structures are explained. As for introduction to programming with C++, variables, if-then-else, some of the loop structures are covered.

COURSE CONTENT

Week	Hour	Date	Topic
1	3	05/04/2026-09/04/2026	Arrays
2	3	12/04/2026-16/04/2026	Final exams of first semester (due to current situation)
3	3	19/04/2026-23/04/2026	Final exams of first semester (due to current situation)
4	3	26/04/2026-30/04/2026	Functions
5	3	03/05/2026-07/05/2026	Global Variables & Pointers
6	3	10/05/2026-14/05/2026	Midterm Exam
7	3	17/05/2026-21/05/2026	Vector & Deque
8	3	24/05/2026-28/05/2026	Vector & Deque
9	3	31/05/2026-04/06/2026	File Stream
10	3	07/06/2026-11/06/2026	Project Presentations

11	3	14/06/2026-18/06/2026	Revision
12	3	21/06/2026-25/06/2026	Final Exam

COURSE/STUDENT LEARNING OUTCOMES

1	Design, compile and execute C++ programs to solve basic problems
2	Describe the concepts of advanced programming topics.
3	Apply C++ control structure, array, function and filestream.
4	Perform file input and output.
5	Creating simple, real life, and all in one project.

COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES

(Blank : no contribution, I: Introduction, P: Profecient, A: Advanced)

	Program Learning Outcomes	**Cont.**
1	Analyze a problem, and identify the computing requirements appropriate to its solution	I
2	Design, implement, and evaluate computer-based systems, process, component, or program to meet desired needs	
3	Function effectively in teams to accomplish a common goal	P
4	Identify professional, ethical, legal, security, social, and economic issues and responsibilities	
5	Analyze the local and global impact of computing on individuals, organizations, and society	
6	Use current techniques, skills, and tools necessary for computing practice	P
7	Apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, web systems and technologies	
8	Identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems	P
9	Effectively integrate it-based solutions into the user environment	I
10	Apply problem solving skills, core it concepts, best practices and standards to information technologies	I
11	Identify and evaluate organizational requirements and current and emerging technologies	I
12	Design and integrate it-based solutions into the organizational environment	I

Prerequisites (Course Reading List and References):	Programming I
Student's obligation (Special Requirements):	Students are expected to attend lectures regularly and on time. Actively participate in class discussions and ask questions. Students are required to complete programming assignments and class works.

Weekly Laboratory/Practice Plan:

Week	**Hour**	**Date**	**Topics**
1	2	05/04/2026-09/04/2026	Arrays
2	2	12/04/2026-16/04/2026	Final exams of first semester (due to current situation)
3	2	19/04/2026-23/04/2026	Final exams of first semester (due to current situation)
4	2	26/04/2026-30/04/2026	Functions
5	2	03/05/2026-07/05/2026	Global Variables & Pointers
6	2	10/05/2026-14/05/2026	Midterm Exam
7	2	17/05/2026-21/05/2026	Vector & Deque
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	9	2	31/05/2026-04/06/2026	File Stream
	10	2	07/06/2026-11/06/2026	Project Presentations
	11	2	14/06/2026-18/06/2026	Revision

Course Book/Textbook:	Starting Out-with-C-Early-Objects-7th-Edition-Gaddis. C++ Programming. 5th edition, D.S.Malik, 2011. Problem Solving, Abstraction, and Design using C++ 6th Edition.
Other Course Materials/References:	H.M.Deitel & P.J.Deitel, C++ How to Program, 9th Edition - D. S. Malik, C++ Programming: From Problem Analysis to Program Design, 6th Edition
Teaching Methods (Forms of Teaching):	Lectures, Practical sessions, Exercises, Presentation, Project, , ,

COURSE EVALUATION CRITERIA

Method	**Quantity**	**Percentage (%)**
Quiz	3	5
Project	1	10
Midterm Exam	1	25
Laboratory	1	10
Final Exam	1	40
Total		**100**

Examinations: Multiple Choices, Short Answers, Practical Questions, ,

Extra Notes:

ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD

Activities	**Quantity**	**Workload Hours for 1 quantity***	**Total Workload**
Theoretical Hours	11	3	33
Practical Hours	11	2	11
Final Exam	1	25	25
Quiz	3	8	24
Project	1	20	20
Midterm Exam	1	20	20
Laboratory	1	5	5
Total Workload			**138**
ECTS Credit (Total workload/25)			**6**

Peer review

Signature:	Signature:	Signature:
Name:	Name:	Name:
Lecturer	Head of Department	Dean