## TEMPLATE FOR COURSE SPECIFICATION

## HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

## **COURSE SPECIFICATION**

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the program specification.

1. Teaching Institution	Al-Nahrain University/ College of Science	
2. University Department/Centre	Computer Science department	
3. Course title/code	Computer Networks / COMP4	
4. Programme(s) to which it contributes	Bsc	
5. Modes of Attendance offered	Full Time	
6. Semester/Year	First Semester/ Fourth Year	
7. Number of hours tuition (total)	45 Theory + 45 Practical	
8. Date of production/revision of this specification	2022-2023	

## 9. Aims of the Course

- Understanding Computer networks.
- Understanding 7-model layers.
- Understanding protocols of each layer and packet journey from source to destination.
- Understanding host addressing through IPv4.0 and IPv6.0.

10. Learning Outcomes, Teaching ,Learning and Assessment Method				
A- Knowledge and Understanding A1. How computers get networked? A2. How the message transmitted from host to host? A3. How protocols work? A4.				
B. Subject-specific skills B1. Analyzing packets, and packets journey. B2. Analyzing computer networks problemsB3				
Teaching and Learning Methods				
Lectures, problem classes				
Assessment methods				
Exam, Test				
C. Thinking Skills C1. Asking: Seeking new information C2. Deduce and Conclude. C3. Compare. C4. Classify				
Teaching and Learning Methods				
Lectures, problem classes				
Assessment methods				
Exam, Test				

Course Structure .11					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2+2		Introduction to computer networking.	Formal Lectures	Class Activity
2	=		Application Layer.	=	Class Activity and Quiz
3	=		Application Layer.	=	Class Activity and Quiz
4	=		Transport Layer.	=	Class activity
5	=		Transport Layer.	=	Class Activity
6	=		Client-server and wireshark program	=	Class Activity and Quiz
7	=		First Mid-Exam	=	
8	=		Network Layer	=	Class Activity
9	=		Network Layer	=	Class Activity
10	=		Data Link Layer	=	Class Activity and Quiz
11	=		Data Link Layer	=	Class Activity and Quiz
12	=		Second mid-exam	=	
13	=		Physical layer	=	Class Activity and Ouiz

# 12. Infrastructure

Required reading:

- · CORE TEXTS
- $\cdot$  COURSE MATERIALS OTHER  $\,\cdot$

Special requirements (include for example workshops, periodicals, IT software, websites)

 Computer networking: a top-down approach / James F. Kurose, Keith W. Ross.—6th ed. Community-based facilities (include for example, guest (Lectures , internship , field studies