## 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 programme specification.

1. Teaching Institution	University of Anbar	
2. University Department/Centre	College of Computer Science and Information Technology – Computer Science Department	
3. Course title/code	Data Networks	
4. Programme(s) to which it contributes	Bachelors of Information System	
5. Modes of Attendance offered	Physical Attendance	
6. Semester/Year	First semester 2022-2023	
7. Number of hours tuition (total)	48	
8. Date of production/revision of this Specification		
9. Aims of the Course		
The student should understand definition of IP Velocities.	ersion 4	
The student should understand topology of Subnetting in IP Version 4		
The student should understand of special addressing		
The student should understand categories of Delivery and Routing of Class full address		
The student should understand of Delivery and Routing of Classless address		
The student should understand of Network Address Translation		
The student should understand Unicast Routing Protocol RIP		
<ul> <li>The student should understand Unicast Routing Protocol OSPF and BGP</li> </ul>		

# 10. Learning Outcomes, Teaching ,Learning and Assessment Method

## A Knowledge and Understanding

A1. The student should understand IP ver. 4

A2. The student should understand Subnetting of IP ver. 4.

A3. The student should understand classfull and classless addressing.

A4. The student should understand Delivery and Routing.

A5. The student should understand Unicast Routing Protocol.

A6. The student should understand Network Address Translation.

## B. Subject-specific skills

B1.

B2.

B3.

## Teaching and Learning Methods

- The student should able to use Packet Tracer software.
- The student should use utilities in the laptop to apply scientific experiment.
- The ability to design and implement computer networks.
- The student should able to send and received packets.

## Assessment methods

Notes	Date	%	Assessment	
	6 <sup>th</sup> week	%1.	First Month exam	١
	10 <sup>th</sup> week	%1.	Second Month exam	۲
	16 <sup>th</sup> week	%1.	Third Month exam	٣
	All weeks	%0	Attendance and HW	٤
	At end of each experiment	%10	Reports and Lab exam	٥
	End of semester	%0.	Final exam	٦
		١	Sum	
		%		

# C. Thinking Skills

C1.

C2...

C3.

C4.

# Teaching and Learning Methods

#### Assessment methods

D. General and Transferable Skills (other skills relevant to employability and personal development)
D1.
D2.

D3.

D4.

11. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2 Theory + 2 Practical		Introduction	Lecture/ Class Discussion	
2	2 Theory + 2 Practical		IP Version 4 Addressing	Lecture/ Class Discussion	
3	2 Theory + 2 Practical		Subnetting in IP Version 4	Lecture/ Class Discussion	
4	2 Theory + 2 Practical		Special Addressing	Lecture/ Class Discussion	
5	2 Theory + 2 Practical		Classless Addressing	Lecture/ Class Discussion	
6	2 Theory + 2 Practical		Test 1	The test is a written, in-class 60 minutes test. It will cover topics studied in the first four weeks	
7	2 Theory + 2 Practical		Don't or y and	Lecture/ Class Discussion	
8	2 Theory + 2 Practical		Delivery and Routing of Classless	Lecture/ Class Discussion	
9	2 Theory + 2 Practical		Network Address Translation	Lecture/ Class Discussion	
10	2 Theory + 2 Practical		Chicast Itouthing	Lecture/ Class Discussion	
11	2 Theory + 2 Practical			The test is a written, in-class 60 minutes test. It will cover topics studied in the second four weeks	
12	2 Theory + 2 Practical		Unicast routing protocol OSPF	Lecture/ Class Discussion	
13	2 Theory + 2 Practical		Unicast routing protocol BGP	Lecture/ Class Discussion	
14	2 Theory + 2 Practical		Revision	Lecture/ Class Discussion	

15	2 Theory +	Final Test	Lecture/ Class	
	2 Practical		Discussion	

12. Infrastructure		
Required reading:  · CORE TEXTS  · COURSE MATERIALS  · OTHER	<ul><li>Lectures</li><li>Home works</li><li>Case study in the Lab</li><li>Weekly reports</li></ul>	
Special requirements (include for example workshops, periodicals, IT software, websites)	<ul> <li>Computer Networking: A Top Down         Approach 6th edition Jim Kurose, Keith         Ross Addison-Wesley March 2012     </li> <li>Data Communications and Networking,         4th edition.,Behrouz A. Forouzan,         McGraw-Hill, 2007     </li> </ul>	
Community-based facilities (include for example, guest Lectures, internship, field studies)		

13. Admissions	
Pre-requisites	Principles of English and Mathematics courses.
Minimum number of students	25
Maximum number of students	50

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