COMPUTER NETWORKING

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 Baghdad/ College of Science for Women
2. University Department/Centre	Computer Science Department
3. Course title/code	Computer Networking/ 410 CCN
4. Programme(s) to which it contributes	Computer Science
5. Modes of Attendance offered	Physical Attendance
6. Semester/Year	Fourth Year/ Second Semester
7. Number of hours tuition (total)	60 total (30 theoretical, 30 practical)

8. Date of production/revision of this specification	22/6/2016

9. Aims of the Course

The given course aim to definition students to main technique used in Computer Networking which have been obtained from a number of Methodology sources For the purpose of establishing the foundations and rules for the methodology course.

10· Learning Outcomes, Teaching ,Learning and Assessment Method
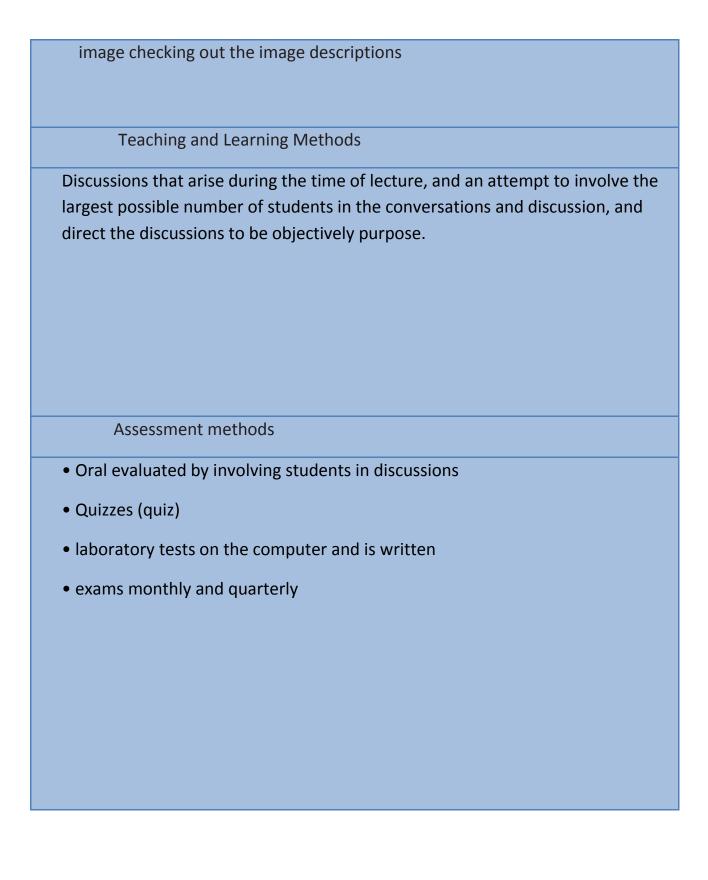
J- Knowledge and Understanding

A1. Identify the General principles of computer networks.

A2. A detailed explanation of the rules and the types of computer networks used for data transmission.

A3. Types of drives used in data transmission within the computer network systems.

A4. The methods used to protect data in networks.

A5.   Learn how to analysis of data across the interior of computer network devices.

B- Subject-specific skills

B1. Knowing the types of computer networks used for data transmission.

B2. Knowing the types of networks used in data communication.

B3. Identify ways to access data across Internet devices.

Teaching and Learning Methods

• Education: provide lectures and printed sources from the modern, diverse and rich sources including examples

• Education: Harnessing smart blackboard to the goal of teaching students and explain the steps the solution and extraction results

• Education: resolving some questions, with intent to contain mistakes and make the students extracted error

• Learning: asking questions and inquiries and making the student turn into a teaching explanation and solution on the blackboard at that point, brainstorming method

• Learning: questions directly and consequently all students to learn the extent of interaction and the rest to be paid attention to

• Learning: Each specific group and explain its interaction between students with questions and answers and provide an environment that enables the student to lecture management or debate

Assessment methods

• Quizzes (quiz) semi-weekly

• Reporting and in the form of aggregates by a report for each set and presented over students

• Questions sudden and overlapping put up with to explain Article

• laboratory tests on the computer and is written to enable the student to the solution without a computer

• monthly and quarterly tests

C. Thinking Skills

C1-providing range solutions to the same problem and discussed both individually and determine the appropriate method of solution to the problem at hand with a stand on the disadvantages of the rest of the solutions

C2- put forward solutions contain inaccuracies and identifying these mistakes After discussion and processed

C3-oral exceptional questions that need exceptional answers where heavyweight grades are assigned and some tipoff grades also provides

C4- choose the most appropriate algorithm used to manipulate the

image checking out the image descriptions
Teaching and Learning Methods
Discussions that arise during the time of lecture, and an attempt to involve the largest possible number of students in the conversations and discussion, and direct the discussions to be objectively purpose.
Assessment methods
• Oral evaluated by involving students in discussions • Quizzes (quiz) • laboratory tests on the computer and is written • exams monthly and quarterly

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

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D1- distribution of specific topics for each group of students to prepare research reports from the the World Wide Web, the sources or the library and drafted in accordance with the basis of the approved formulation research.

D2-giving leadership debate administration, however, the group discussion and enable them to drive and manage the dialogue

D3- alert on errors in the answers to the oral and discuss them to learn their mistake.

D4- alert on errors in the answers of students in the written exams to clarify to the student.

11. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
١	٢		Details of the ISO-OSI Model	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
٢	٢		Physical Layer and Framing in the data link layer	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
٣	٢		Network and Transport Layers	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
٤	٢		Error Control and Communication protocols	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
٥	٢		Session ,Presentation and Application layers	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand

٦	٢		Ethernet Network	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
٧	٢		Ring ,Slotted Ring ,CBX,FDDI and Token Bus Network.	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
٨	٢		Window Size and Flow Control	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
٩	٢		Data Movement Through the TCP/IP Model	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
١٠	٢		Internet Names and Addresses	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand

١١	٢		IP routing	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
١٢	٢		IPvr.4	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
١٣	٢		IPvr.6	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
١٤	٢		TCP/IP	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand
١٥	٢		UDP	According to point 10 hereinabove and on demand	According to point 10 hereinabove and on demand

12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	1-Data Communications and Networking[Behrouz A. Forouzan] 4th edition,2007 2-Computer Networks, fourth edition Tanenbaum, A., 2003. 3-Understanding Data Communications and Networks, Shay, W., 1995. 4-Data communications, Computer Networks and OSI, Halsall, F., 1996. 5-Computer Networks and Internets, Comer, D., 1999.
Special requirements (include for example workshops, periodicals, IT software, websites)	Packet Tracer v3.1 or 3.4
Community-based facilities (include for example, guest Lectures , internship , field studies)	

13. Admissions	
Pre-requisites	Mathematics, Computer Organization
Minimum number of students	Subject to classroom size, 25 student as minimum
Maximum number of students	Subject to classroom size, maximum 35 students