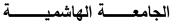
## The Hashemite University









### Deanship of Academic Development and International Outreach

عمادة التطوير الأكاديمي

والتواصل الدولي

# Computer Networks (1910011320)

## Second Semester 2021/2022

COURSE INFORMATION			
Course Name: Computer Netwo	rks	Course Code: 1910011320	
Semester: Second Semester 202	21/2022	Section: Mandatory	
Department: Department of Con	nputer Science and	Core Curriculum:	
Applications			
Faculty: Prince Al-Hussein Bin Ab	dullah II Faculty for		
Information Technology			
Days and Times:		Credit Hours: 3	
Monday: 9:30:-11:00, 11:00-12:	30, 12:30-2:00	<b>Prerequisites</b> : 1910011123 - Digital Logic Design	
Wednesday: 9:30:-11:00, 11:00-	12:30, 12:30-2:00		
Classroom: IT 101			
	COURSE DESCR	RIPTION	
Three credit hours is counted for t	his course. This course is an	introductory course on computer networks. It	
introduces the underlying concept	s and principles of modern co	mputer networks with emphasis on protocols,	
architectures, and implementation	issues. The main goal of this	course is to understand layering in computer	
networks, understand different pro	tocol stacks (OSI and TCP/IF	), understand functions and protocols within a layer,	
understand how layers fit together	and finally understand how t	he Internet works.	
	DELIVERY ME	THODS	
The course will be delivered throu	gh a combination of active le	arning strategies. These will include:	
<ul> <li>PowerPoint lectures and activ</li> </ul>	e classroom based discussion		
Video lectures			
E-learning resources: e-readin		uizzes through Model and Microsoft Team	
	FACULTY INFOR	MATION	
Name	Mohammad Bsoul		
Academic Title:	Professor		
Office Location:	IT 234		
Telephone Number:			
Email Address:	mbsoul@hu.edu.jo		
Office Hours:	Monday 1:45-3:00		
	Wednesday 1:45-3:00		
	Please send an e-mail (r	nbsoul@hu.edu.jo) to meet at any other time.	

#### **REFERENCES AND LEARNING RESOURCES**

**Required Textbook:** Data Communications and Networking, Behrouz Forouzan, 6th ed., McGraw-Hill, 2021.

#### Suggested Additional Resources:

- Data and Computer Communications, William Stallings, 10<sup>th</sup> ed., Prentice-Hall 2013.
- Computer Networks, Andrew S. Tanenbaum, Nick Feamster, and David J. Wetherall, 6<sup>th</sup> ed., Pearson, 2019.
- Computer Networks and Internets, Douglas E. Comer, 6<sup>th</sup> ed., Prentice-Hall, 2015.

Core Curriculum Learning Outcomes	Program Learning Outcomes	Course Objectives	Student Learning Outcomes	Assessment Method
Design, implement, and evaluate computing- based solution to meet a given set of computing requirements in	Teach computer science as a discipline of problem-solving.	<ul> <li>Explain the underlying concepts and principles of modern computer networks.</li> <li>Describe layering in computer networks and functions and protocols within a layer.</li> </ul>	SLO2 SLO1	Exams Exams
the context of the program's discipline.		<ul> <li>Describe different types of transmission media.</li> </ul>	SLO1	Exams
		Explain how the Internet works.	SLO2	Exams
		<ul> <li>Design an internetwork using Cisco Packet Tracer simulator.</li> </ul>	SLO2	Assignment

## **STUDENT LEARNING OUTCOMES MATRIX\***

#### ACADEMIC SUPPORT

It is The Hashemite University policy to provide educational opportunities that ensure fair, appropriate and reasonable accommodation to students who have disabilities that may affect their ability to participate in course activities or meet course requirements. Students with disabilities are encouraged to contact their Instructor to ensure that their individual needs are met. The University through its Special Need section will exert all efforts to accommodate for individual's needs.

Special Needs Section: Tel: Location: Email:

#### **COURSE REGULATIONS**

#### Participation

Class participation and attendance are important elements of every student's learning experience at The Hashemite University, and the student is expected to attend all classes. A student should not miss more than 15% of the classes during a semester. *Those exceeding this limit of 15% will receive a failing grade regardless of their performance*. It is a student's responsibility to monitor the frequency of their own absences. Attendance record begins on the first day of class irrespective of the period allotted to drop/add and late registration. It is a student's responsibility to sign-in; failure to do so will result in a non-attendance being recorded.

In exceptional cases, the student, with the instructor's prior permission, could be exempted from attending a class provided that the number of such occasions does not exceed the limit allowed by the University. The instructor will determine the acceptability of an absence for being absent. A student who misses more than 25% of classes and has a valid excuse for being absent will be allowed to withdraw from the course.

#### Late or Missed Assignments

In all cases of assessment, students who fails to attend an exam or assignment discussion on the scheduled date without prior permission, and/or are unable to provide a medical note, will automatically receive a fail grade for this part of the assessment.

- Submitting the assignment on time is a key part of the assessment process (Late turn-ins not allowed). There will be a discussion after the deadline and not attending the discussion means your mark will be zero.
- In cases where a student misses an exam on account of a medical reason or with prior permission; in line with University regulations an incomplete grade for the specific assessment will be awarded and an alternative assessment or extension can be arranged.

#### Student Complaints Policy

Students at The Hashemite University have the right to pursue complaints related to faculty, staff, and other students. The nature of the complaints may be either academic or non-academic. For more information about the policy and processes related to this policy, you may refer to the students' handbook.

#### **Course Calendar and Assessment**

Students will be graded through the following means of assessment and their final grade will be calculated from the forms of assessment as listed below with their grade weighting taken into account. The criteria for grading are listed at the end of the syllabus

Assessment	Grade Weighting	Deadline Assessment
Mid Exam	40%	
Assignment	10%	
Assignment Discussion	10%	
Final Exam	40%	

#### **Description of Exams**

Test questions will predominately come from material presented in the lectures. Semester exams will be conducted during the regularly scheduled lecture period. Exam will consist of multiple choice questions.

No make-up exams, homework or quizzes will be given. Only documented absences will be considered as per HU guidelines.

Grades are not negotiable and are awarded according to the following criteria\*:

Letter Grade	Description	Grade Points
A+	Excellent	4.00
А		3.75
A-		3.50
B+	Very Good	3.25
В		3.00
В-		2.75
C+	Good	2.50
С		2.25
C-		2.00
D+	Pass	1.75
D	Pass	1.50
F	Fail	0.00
I	Incomplete	-

## WEEKLY LECTURE SCHEDULE AND CONTENT DISTRIBUTION

Торіс	Chapter	Week #
	in Text	
Introduction	Ch1	Week 1,2
Networks Models	Ch2	Week 3,4
Transmission Media	Ch7	Week 5
Switching	Ch8	Week 6,7
Data Link Control	Ch11	Week 8,9,10
Media Access Control	Ch12	Week 11,12
Wired LANs: Ethernet	Ch13	Week 13
Introduction to Network Layer	Ch19	Week 14,15