



Al al-Bayt University
Information Technology Faculty
Information Systems Department

902221 Computer Network for Business
Second Semester 2014/2015

Course Catalog

An introduction to the design and analysis of computer communication networks. Topics include application layer protocols, Internet protocols, network interfaces, local and wide area networks, wireless networks, bridging and routing, and current topics.

Textbook(s)

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|------------------|------------------------------------|
| Title | Data Communications and Networking |
| Author(s) | Behrouz Forouzan |
| Edition | 5 th edition |
| Publisher | McGraw-Hill |
| Year | 2013 |

Instructors

| | |
|------------------------|---------------------------|
| Coordinator | Dr.Wafa Slaibi Alsharafat |
| Office Location | IT building |
| Office Phone | 02/6297000 ext. 3354 |
| Email | wafa@aabu.edu.jo |

Class Schedule and Locations

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|---|--|
| Section 1: Time(s): 12:30 – 14:00 Location: Qurish 186 | Section 2: Time(s): 9:30 – 11 Location: Master Room |
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Office Hours

Dr. Wafa AlSharafat : Sundays, Tuesdays : 9:30-11:00, Mondays 11:00 – 12:30

| Course Objectives | Assessment Method |
|--|--------------------------|
| Objective 1 : Become familiar with layered communication architectures (OSI and TCP/IP). | Exams |
| Objective 2 Understand the client/server model and key application layer protocols. | Exams +assignment |
| Objective 3: Understand the concepts of reliable data transfer and how TCP implements these concepts | Exams +assignment |
| Objective 4 : Learn the principles of routing of IP | Exams +assignment |
| Objective 5 : Familiarize the student with current topics such as security, network management, sensor networks, and/or other topics | Exams +assignment |

| Topics Covered | | |
|--|--------------------|---------|
| Topic | Chapter(s) in Text | Week(s) |
| Introduction <ul style="list-style-type: none"> • DATACOMMUNICATIONS • NETWORKS • THE INTERNET • PROTOCOLS AND STANDARDS | Ch1 | |
| Network Models <ul style="list-style-type: none"> • LAYERED TASKS • THE OSI MODEL • LAYERS IN THE OSI • TCP/IP PROTOCOLS UITE • ADDRESSING | Ch2 | |
| Data and Signals <ul style="list-style-type: none"> • ANALOG AND DIGITAL • PERIODIC ANALOG SIGNALS • DIGITAL SIGNALS • TRANSMISSION IMPAIRMENT • DATA RATE LIMITS • PERFORMANCE | Ch3 | |
| | | |
| Bandwidth Utilization | Ch6 | |
| Analog Transmission (Additional) | | |
| Final Exam | | |

| Evaluation | | |
|-------------------|-----------------------|--------|
| Assessment Tool | Expected Due Date | Weight |
| First Exam | 6 th week | 20% |
| Second Exam | 12 th week | 20% |
| Lab | During | 10% |
| Final Exam | TBA | 50 % |

| Policies | |
|---------------------|--|
| Attendance | It is strongly recommended that students attend all data structure lectures. Also, university regulations mandate that students may not miss more than 10% of classes without valid excuses. In all cases, they may not miss more than 20% of classes. Should they do, they will be not be allowed to take course exams. |
| Homework/Lab | Students are expected to attend lab sessions and submit assignments on time. |
| Exams | Exams will be close-book. Exam dates will be announced later according to departmental and university schedules. |
| Plagiarism | You should not copy other people's work and claim it is yours. Detected plagiarism will be dealt with as per university regulations. |