



Course Specification

(Bachelor)

Course Title: Selected Topics in Computer Networks

Course Code: 443CCN-3

Program: Bachelor of Science in Computer Networks

Department: Networks and Communications Engineering

College: Computer Science and Information Systems

Institution: Najran University

Version: 1.0

Last Revision Date: 20 Feb 2024



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A. General information about the course:

1. Course Identification

1. Credit hours: (3)

2. Course type

A. University College Department Track Others
 B. Required Elective

3. Level/year at which this course is offered: Level 8 / Year 4

4. Course General Description:

This course presents specific novel topics, concepts, problems, or emerging computer network technologies. Recent advanced emerging technologies in computer networks, such as software-defined networking (SDN) and network functions virtualization (NFV), information-centric networking, smart grid communications, new wireless generations (6G and beyond), security aspects of new emerging technologies, etc. Students will search the literature for the state of the art of the most significant emerging technologies, explore new ideas through simulation projects, and finally present their findings.

This course will be guided by its instructor. The instructor of the course selects the topics based on his knowledge of the latest developments in computer network science. The course instructor may distribute the topics to the students so that each student will study in depth a different topic. Then the student should discuss the concepts that he learned with his classmates under the supervision of the instructor of the course.

5. Pre-requirements for this course (if any):

No

6. Co-requisites for this course (if any):

No

7. Course Main Objective(s):

To introduce and deeply explain some subjects which have not been demonstrated in previous semesters and have the ability to explore more beyond the subject.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	100%





No	Mode of Instruction	Contact Hours	Percentage
2	E-learning		
3	Hybrid <ul style="list-style-type: none"> • Traditional classroom • E-learning 		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures [3 contact hours × 15 weeks]	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial [1 contact hour × 15 weeks]	15
5.	Others (specify)	
Total		60

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Describe concepts and components of modern topics presented.	K1, K2	TS: 1-Interactive Lectures using PowerPoint slides and explaining the essential points in more detail with the help of a whiteboard. TS: 2- Encouraging the students to use the online links to know the concepts in detail. TS: 3 – Recall the topics discussed in the last lecture by asking questions to the students.	Indirect: - Students CLO Survey Direct: - Quizzes. - Assignment. - Midterm exam (Exam consists of multiple-choice questions, true/false, fill in the blanks, and theoretical questions.) - Final Exam
1.2	Recognize the mechanism of work, systems and ideas of the topics of the course.	K2		





Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
			<p>TS: 4 – Motivating students to be active during class by asking questions regularly during the lecture.</p> <p>TS: 5 – Associating the topics in with the course learning outcomes (CLO).</p>	
...				
2.0	Skills			
2.1	Use methodology and solutions to the problems of the topics presented.	S4	<p>TS: 1-Interactive Lectures using PowerPoint slides and explaining the essential points in more detail with the help of a whiteboard.</p> <p>TS: 2- Encouraging the students to use the online links to know the concepts in detail.</p> <p>TS: 3 – Recall the topics discussed in the last lecture by asking questions to the students.</p> <p>TS: 4 – Motivating students to be active during class by asking questions regularly during the lecture.</p> <p>TS: 5 – Associating the topics in with the course learning outcomes (CLO).</p>	<p>Indirect:</p> <ul style="list-style-type: none"> - Students CLO Survey <p>Direct:</p> <ul style="list-style-type: none"> - Quizzes. - Assignment. - Midterm exam (Exam consists of multiple-choice questions, true/false, fill in the blanks, and theoretical questions.) - Final Exam
2.2	Build the skills of quantitative and logical analysis of scientific and practical issues in the subjects presented.	S4, S6		
...				
3.0	Values, autonomy, and responsibility			
3.1	Develop leadership and teamwork skills in the implementation	V1	Small group work, small group discussion, Course	<p>Indirect:</p> <ul style="list-style-type: none"> - Students CLO Survey





Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
	of the topics presented.		Mini Projects, Assignments.	Direct: Mini Projects, Assignments.
3.2	Appraise the self-learning and judgement skills regarding professional behavior and immoral practices.	V1	Small group work, small group discussion, Course Mini Projects, Assignments.	Indirect: - Students CLO Survey Direct: Mini Projects, Assignments.
...				

C. Course Content

No	List of Topics	Contact Hours
1.	To be determined by the course instructor each semester	60
2.		

Total		60

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quizzes	2, 4, 8, 11	8%
2.	Assignments or mini project (presentation)	3, 5, 8, 9	12%
3.	Midterm Examination	6th week	30%
٤.	Final Examination	16th to 18th week	50%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	To be determined by the instructor
Supportive References	To be determined by the instructor
Electronic Materials	To be determined by the instructor
Other Learning Materials	To be determined by the instructor



2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Lecture Rooms with 30 seats and a whiteboard or a smartboard.
Technology equipment (projector, smart board, software)	Desktop/ Laptop computer Multimedia Projector
Other equipment (depending on the nature of the specialty)	A File cabinet to keep Class Stuff, Markers, papers and student Files, and a printer to print program screenshots.

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	<ul style="list-style-type: none"> - Indirect (questionnaire) - University online questionnaire for evaluation the course by students. - Observing the students' opinions recorded on the college student site. Appeal & suggestions box
Effectiveness of Students assessment	Peer reviewer	Direct (review of the quality of the exam done by the course coordinator)
Quality of learning resources	Faculty & students	Lecturers prepare and create the learning resources before the class begins and make them more related to the course. Questionnaire
The extent to which CLOs have been achieved	Faculty	Student assessments reviewing
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	DEPARTMENT COUNCIL
REFERENCE NO.	14450824-0482-00014
DATE	5/3/2024

