



Course Specification

(Bachelor)

Course Title: **Network Administration**

Course Code: **462CIS-3**

Program: **Information Systems**

Department: **Department of Information Systems**

College: **College of Computer Science and Information**

Institution: **Najran University**

Version: *Course Specification Version Number*

Last Revision Date:

Table of Contents

A. General information about the course:	3
B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods	4
C. Course Content	11
D. Students Assessment Activities	12
E. Learning Resources and Facilities	12
F. Assessment of Course Quality	13
G. Specification Approval	13



A. General information about the course:

1. Course Identification

1. Credit hours: ()

3 (2,1,0) [Theory, Lab, Tutorial]

2. Course type

A. ☐ University ☐ College ☒ Department ☐ Track ☐ Others
B. ☒ Required ☐ Elective

3. Level/year at which this course is offered: (Level 13 / Year 4)

4. Course General Description:

This course provides practical implementation of networking as well as a knowledge of related equipment and terminologies. The course also describes the managing level networks using Active Directory and remote access. It also focuses on network management and environment customization techniques, including creating users/groups, managing file permissions, configuring server roles, using group policies to configure and secure the network, routine system maintenance and troubleshooting.

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

461CIS-3

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

7. Course Main Objective(s):

The course introduces students to the foundational concepts and experience in networking administration. The course provides the theory, concepts and practical experience in the design, installation and configuration of personal computers, peer-to-peer networks and client server networks meeting user requirements

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	50	100%
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 * 10 weeks]	20
2.	Laboratory/Studio. [3 contact hours * 10 weeks]	20
3.	Field	
4.	Tutorial	10
5.	Others (specify)	
Total		50

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

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Illustrate the responsibilities of a network administrator.	K1	<p>Lectures, active learning, collaborative and cooperative learning, and independent study assignments are used as teaching strategies.</p> <ul style="list-style-type: none"> - Showing and delivering PPT presentations in class. - Using a whiteboard to explain essential points in more detail. - Motivating students to be 	<ul style="list-style-type: none"> - Class Quizzes - Assignment. - Midterm exam (Each exam consists of multiple choice questions, true/false, fill in the blanks, and theoretical questions.) - Final Exam



Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
			active during class by asking questions regularly during lectures.	
1.2	Describe the key terminologies and technologies of network administration.	K1	<p>Lectures, active learning, collaborative and cooperative learning, and independent study assignments are used as teaching strategies.</p> <ul style="list-style-type: none"> - Showing and delivering PPT presentations in class. - Using a whiteboard to explain essential points in more detail. - Motivating students to be active during class by asking questions regularly during lectures. 	<ul style="list-style-type: none"> - Class Quizzes - Assignment. - Midterm exam (Each exam consists of multiple choice questions, true/false, fill in the blanks, and theoretical questions.) - Final Exam
...				
2.0	Skills			
2.1	Install Network Operating System and other services in the servers	S1	<ul style="list-style-type: none"> - Design a network on whiteboard for students to make them more familiar with various networks topologies. - Ask 	<ul style="list-style-type: none"> - Class Quizzes. - Assignment. - Midterm exam - Final Exam





Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
			students to give scenarios that required to analyze, evaluate, and configure a network to solve such problems - Let students solve problems regarding sharing resources in small groups and giving correction on their solution during class. - Motivating students to be active during class by asking questions regularly. - Let students present their work after group discussion session. - Giving students tutorial related to scheduling algorithm to explain them in more detail. - Motivating students to work in the home, to search the internet, to read related reference books by giving them assignments.	
2.2	Manage Microsoft Active Directory and its services	S3	- Design a network on whiteboard for students to make them more familiar with various networks topologies. - Ask students to give scenarios that required to analyze,	- Class Quizzes. - Assignment. - Midterm exam - Final Exam





Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
			<p>evaluate, and configure a network to solve such problems - Let students solve problems regarding sharing resources in small groups and giving correction on their solution during class. - Motivating students to be active during class by asking questions regularly. - Let students present their work after group discussion session. - Giving students tutorial related to scheduling algorithm to explain them in more detail. - Motivating students to work in the home, to search the internet, to read related reference books by giving them assignments.</p>	
2.3	Manage Network domain users and groups issues	S1	<p>- Design a network on whiteboard for students to make them more familiar with various networks topologies. - Ask students to give scenarios that required to analyze, evaluate, and configure a network to solve such</p>	<p>- Class Quizzes. - Assignment. - Midterm exam - Final Exam</p>



Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
			<p>problems - Let students solve problems regarding sharing resources in small groups and giving correction on their solution during class.</p> <p>- Motivating students to be active during class by asking questions regularly.</p> <p>- Let students present their work after group discussion session.</p> <p>- Giving students tutorial related to scheduling algorithm to explain them in more detail.</p> <p>- Motivating students to work in the home, to search the internet, to read related reference books by giving them assignments.</p>	
2.4	Monitor the Network performance and errors	S2,S4	<p>- Design a network on whiteboard for students to make them more familiar with various networks topologies.</p> <p>- Ask students to give scenarios that required to analyze, evaluate, and configure a network to solve such problems</p> <p>- Let students solve problems regarding</p>	<p>- Class Quizzes.</p> <p>- Assignment.</p> <p>- Midterm exam</p> <p>- Final Exam</p>



Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
			<p>sharing resources in small groups and giving correction on their solution during class.</p> <ul style="list-style-type: none"> - Motivating students to be active during class by asking questions regularly. - Let students present their work after group discussion session. - Giving students tutorial related to scheduling algorithm to explain them in more detail. - Motivating students to work in the home, to search the internet, to read related reference books by giving them assignments. 	
2.5	Troubleshoot Network performance and errors	S2	<ul style="list-style-type: none"> - Design a network on whiteboard for students to make them more familiar with various networks topologies. - Ask students to give scenarios that required to analyze, evaluate, and configure a network to solve such problems - Let students solve problems regarding sharing resources in small groups and giving correction on 	<ul style="list-style-type: none"> - Class Quizzes. - Assignment. - Midterm exam - Final Exam

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
			<p>their solution during class.</p> <ul style="list-style-type: none"> - Motivating students to be active during class by asking questions regularly. - Let students present their work after group discussion session. - Giving students tutorial related to scheduling algorithm to explain them in more detail. - Motivating students to work in the home, to search the internet, to read related reference books by giving them assignments. 	
2.6	Manage network security issues	S1	<ul style="list-style-type: none"> - Design a network on whiteboard for students to make them more familiar with various networks topologies. - Ask students to give scenarios that required to analyze, evaluate, and configure a network to solve such problems - Let students solve problems regarding sharing resources in small groups and giving correction on their solution during class. - Motivating students to be active 	<ul style="list-style-type: none"> - Class Quizzes. - Assignment. - Midterm exam - Final Exam



Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
			during class by asking questions regularly. - Let students present their work after group discussion session. - Giving students tutorial related to scheduling algorithm to explain them in more detail. - Motivating students to work in the home, to search the internet, to read related reference books by giving them assignments.	
3.0	Values, autonomy, and responsibility			
3.1	Develop teamwork and research capabilities.	V1,V2	Report and presentation assignment	Assignment
3.2				
...				

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Windows Server Administration and Virtualization	7
2.	Administering Microsoft Windows Server 2019	5
3.	User Accounts	4
4.	Group Accounts	4
5.	Computer Accounts	4
6.	Files and Folders	5
7.	Backup Data	4
8.	Maintaining and Monitoring the Server Operating System and the network objects	5
9.	Monitoring Microsoft Windows Server 2019	5
10.	Monitor the Network performance and error	5
11.	Revision	2



Total

50

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Midterm	5	20
2.	Quiz 1	3	5
3.	Quiz 2	7	5
4.	Assignment (Lab)	8	5
5.	Assignment (Theory)	9	10
6.	Lab Activities	1-9	5
7.	Lab Final Exam	10	10
8.	Final Exam	11-13	40
9.	Total		100

*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	Zacker, Craig , Installation, Storage and Compute with Windows Server 2016 1st Edition, Kindle Edition, 2017 ISBN-10: 0-7356-9882-1 [REF MCSE Exam 70-740]
Supportive References	Corbin, Wendy. Microsoft Official Academic Course: Planning, Implementing and Maintaining a Microsoft Windows Server 2016 Active Directory Infrastructure. Redmond, Microsoft Press [ISBN 0-07-294490-0][REF MCSE Exam 70-294] Simpson, Ted and Simpson, Micheal. Guide to NetWare 6.0/6.5 Administration [Enhanced Edition]. Cambridge, Course Technology - ITP, 2004 [ISBN 0-619-21543-7]
Electronic Materials	Saudi Digital Library
Other Learning Materials	

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Lecture Rooms with 45 seats and a whiteboard or a smart board. Laboratory with 45 PC and one server
Technology equipment (projector, smart board, software)	Desktop/ Laptop computer Multimedia Projector Windows Server 2019 Virtual Box

Items	Resources
Other equipment (depending on the nature of the specialty)	A File cabinet to keep Class Stuff, Markers, papers and students Files, and a printer to print program screenshots

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Indirect
Effectiveness of Students assessment	Instructor	Classroom Discussions
Quality of learning resources	Instructor	Questionnaire
The extent to which CLOs have been achieved	Instructor	Direct
Other		

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

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	17th Department Council
REFERENCE NO.	14460810-0976-00017
DATE	10/02/2025

