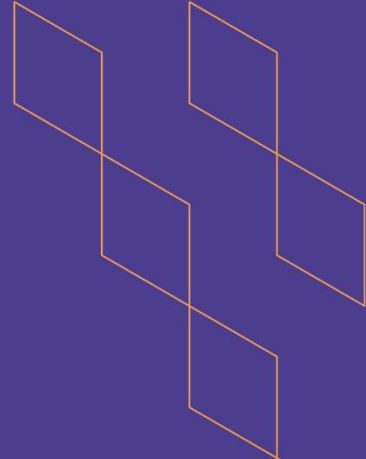T-104
2022

Course Specification

Course Title: **IT Infrastructure**

Course Code: **IT10501**

Program: **Information Technology**

Department: **Information Technology**

College**:** **Computer Science and Information Technology**

Institution: **University of Al-Baha**

Version: **1**

Last Revision Date: **30/3/2023**

Table of Contents:

A. General information about the course:

Course Identification				
1. Credit hours:				
2. Course type				
a. University ☐	College ☐	Department☐	Track☐	Others☐
b. Required ☒	Elective☐			
3. Level/year at which this course is offered:	Level: 4Th /Year 2			
4. Course general Description				
5. Pre-requirements for this course (if any): none				
6. Co- requirements for this course (if any): none				
7. Course Main Objective(s)				

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	36 Hours	100%
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	36
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	

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 the conceptual IT infrastructure model and the IT System model - Support existing operations - Enable development of new business - Provide efficiencies	K1	Lecture	-Midterm exams - Final Exam
1.2	Realize the current trends in IT infrastructure. - Ability to demonstrate basic knowledge and understanding of essential facts, concepts, principles, and theories relating to how information technology is being currently used, and how it fits into a business enterprise	K1	Lecture	-Midterm exams - Final Exam
...				
2.0	Skills			
2.1	Employ traits that make IT Systems valuable (nonfunctional attributes: o Availability o Performance o Security	S1	Lecture	-Midterm exams - Final Exam
2.2	Evaluate how various components fit into the IT infrastructure o Data center o Servers o Networks o Storage	S3	Lecture	-Quiz - Final Exam

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
	o Compute o Operating Systems o End User Device			
…				
3.0	Values, autonomy, and responsibility			
3.1	Manage attributes of IT Systems	V2	Course project	Report & Slides presentation

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to IT Infrastructure Models	1.5
2.	IT Systems Models	1.5
3.	Attributes of IT Infrastructure and its Components	3
4.	Availability	3
5.	Performance	3
6.	Security	3
7.	Data Centers	3
8.	Servers	3
9	Networking	3
10.	Storage	3
11.	Compute	3
12.	Operating Systems	3
13.	End User Devices	3

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Midterm Exam	6th week	20%
2.	Quiz	8th week	15%
3.	Course project (report and presentation)	10th week	15%
4.	Final Exam	11th week	50%
5.	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	IT Infrastructure Architecture - Infrastructure Building Blocks and Concepts Second Edition [Hardcover] SjaakLaan Hardcover: 438 pages Publisher: Lulu.com (February 24, 2013) Language: English ISBN-10: 1291250794 ISBN-13: 978-1291250794
Supportive References	• Computer Science Curriculum 2013 – http://cs2013.org • ACM(Association for Computer Machinery) Curricula Recommendations - http://www.acm.org/education/curricula-recommendations • Communications of ACM (Association for Computer Machinery) - http://cacm.acm.org/ • Journal of the ACM - http://jacm.acm.org/ • ACM SIGCSE (Special Interest Group on Computer Science Education) bulletin -http://www.sigcse.org/Bulletin • ACM Transactions on Computing Education (TOCE) - http://toce.acm.org/
Electronic Materials	• Access to the Saudi Digital Library (SDL). • Using the learning management system of the university – Rafid System (https://lms.bu.edu.sa/). • ACM (Association for Computer Machinery) web site - http://www.acm.org • ACM SIGCSE (Special Interest Group on Computer Science Education) resource web site - http://www.sigcse.org/SIGresources • IEEE Computer Society web site - http://www.computer.org/portal/web/guest/home • Intel The Journey Inside web site (has a collection of interactive, online lessons about technology, computers, and society) – http://educate.intel.com/en/TheJourneyInside/ • Google Code University Curriculum Resource web site - http://code.google.com/edu/resources/index.html
Other Learning Materials	None

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	A classroom or lecture hall with whiteboard for 25 students.
Technology equipment (projector, smart board, software)	A digital image projection system with connection to desktop computer. High-speed Internet connection
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	• Students • Peer Reviewer	• Survey (indirect) • Peer review (direct
Effectiveness of students assessment	• Students • Exam Evaluation	• Survey (indirect) • Exam Review (direct)
Quality of learning resources	• Faculty • Students	Survey (indirect)
The extent to which CLOs have been achieved	• Faculty • Course Coordinator	• Exams (direct) • Exit Exams (direct)
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	30/3/2023