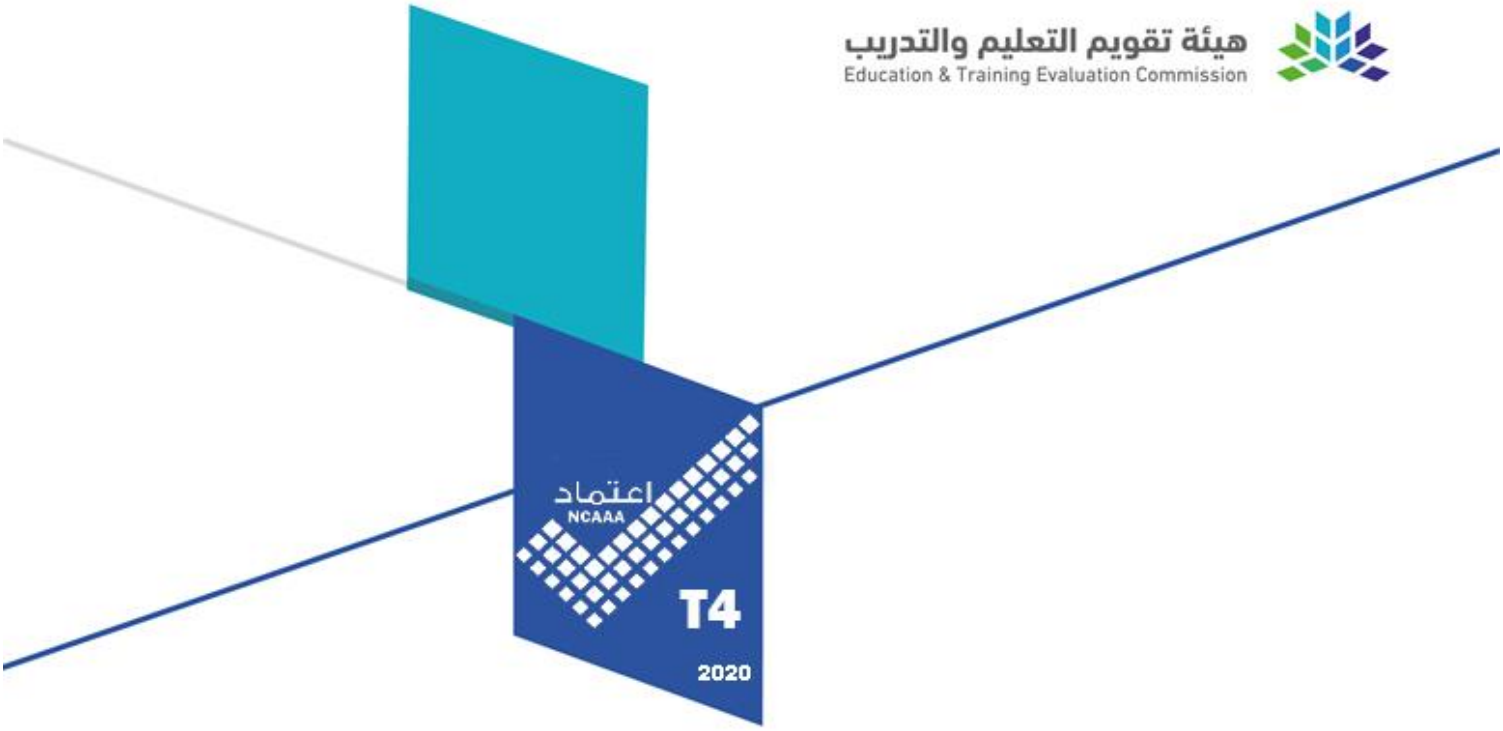
هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission



Course Specifications

Course Title:	**Multimedia Information Systems**
Course Code:	**434CIS-3**
Program:	**Information Systems**
Department:	**Information Systems Department**
College:	**College of Computer Science and Information Systems Institution:**
Institution:	**Najran University**

Table of Contents

A. Course Identification

1. Credit hours: 3 (2, 1, 0) [Theory, Lab, Tutorial]
2. Course type **a.** University ☐ College ☑ Department ☐ Others ☐ **b.** Required ☑ Elective ☐
3. Level/year at which this course is offered: Level 10/ Year
4. Pre-requisites for this course (if any)**:**
5. Co-requisites for this course (if any)**:**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	**50**	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	20
2	**Laboratory/Studio**	20
3	**Tutorial**	10
4	**Others** (specify)	
	Total	50

B. Course Objectives and Learning Outcomes

1. Course Description

This course introduces multimedia concept, multimedia information system, multimedia components such as graphics, image, text, video, sound and animation. Calculation of storage size of image ,audio and video with different colour black & white, colour map or gray scale and true color, and interested in digital media, read on to discover career and education opportunities available in this growing specialty, Compression, Optical Memory Media, Programming, Resources and Quality of Service, Media Server, Documents, Semantics (Ontology and Metadata), Synchronization, Design, Application, Learning, and User Interfaces.

2. Course Main Objective

To introduce the concepts of multimedia, Multimedia Information System and to understand how Multimedia Information System is affecting Labor marking , business enterprises , governments, consumers, and people in general.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Define Multimedia Information System, devices ,applications ,authoring , Data compression ,Quality of Service , and multimedia network.	K1
2	**Skills :**	
2.1	Calculate storage size of image ,audio and video	S1, S4
2.2	Solve simple compression using Huffman Coding Algorithm	S2, S4
2.3	Create Macromedia Flash, animations and learning interactions	S1, S2 , S4
3	**Values:**	
3.1	Develop leadership and teamwork skills in the implementation of the concept of multimedia in small projects.	V1, V2
3.2	Appraise the self-learning and judgement skills regarding professional behavior and immoral practices.	V3

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to Multimedia Technology	4 Hrs
2	Multimedia system, Multimedia Components	4 Hrs
3	Graphic and image Data Representation	4 Hrs
4	Multimedia Data Basics	6 Hrs
5	Type extensions of (Image , Video , Audio)	6 Hrs
6	Data Compression Method and Classification	8Hrs
7	Apply run_lingth coding and huffman coding	7 Hrs
8	Compression presentation and Method (image ,Audio ,Video)	6 Hrs
9	ATM Network and QoS	6 Hrs
10	Multimedia Authoring Concepts and Tools	6 Hrs
11	Access Networks and Techniques (UMTS)	6 Hrs
12	Software throws server / Client	3 Hrs
13	Concept of (GIS/GPS)	4 Hrs
Total		50

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Define the basic multimedia concepts, devices, applications ,authoring compression ,Quality of Service ,Multimedia network and GIS concept the current trends in multimedia	Class lectures (Showing and delivering PPT presentation in the class), and lecture notes, are designed to achieve the course objectives.	Quiz ,midterm exam ,Final exam

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.2			
…			
2.0	**Skills**		
2.1	Distinguish the basic multimedia concepts, devices ,applications ,authoring compression ,Quality of Service ,Multimedia network and GIS concept the current trends in multimedia	Lab and Class lectures (Showing and delivering PPT presentation in the class), and lecture notes, are designed to achieve the course objectives.	Following methods are used to assess student's skills: Lab Activities. Homeworks Assignment
2.2	Calculate storage size of image ,audio and video (Black and white ,colour map or gray scale and true color)	Lab and Class lectures (Showing and delivering PPT presentation in the class), and lecture notes, are designed to achieve the course objectives.	
2.3	Solve simple compression using Huffman coding Algorithm	Lab and Class lectures (Showing and delivering PPT presentation in the class), and lecture notes, are designed to achieve the course objectives.	
2.4	Create Macromedia Flash, animations and learning interactions	Lab and Class lectures(Showing and delivering PPT presentation in the class). Showing software installation during lab Group discussion	
3.0	**Values**		
3.1	Develop leadership and teamwork skills in the implementation of the concept of multimedia in small project.	• Class lectures(Showing and delivering PPT presentation in the class). • Labs • Showing software installation during lab • Group discussion	Assignment using rubric assessment
3.2	Appraise the self-learning and judgement skills regarding	• Class lectures(Showing	

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	professional behavior and immoral practices.	and delivering PPT presentation in the class). • Labs • Showing software installation during lab • Group discussion	
…			

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes	TBA	5%
2	Assignments	3th week	5%
3	Mid Term Exam	6th week	20%
4	Mid Lab Exam and Lab Project/Quiz	TBA	10%
5	Final Lab Exam	11th week	10%
6	Final Exam	12th and 13th week	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Fundamentals of Multimedia (Texts in Computer Science) 3rd ed. 2021 Edition
Essential References Materials	
Electronic Materials	R. Steinmetz; K. Nahrstedt: Fundamentals of Multimedia, Vol. 1: Media Coding and Content Processing. Prentice Hall: 2014, ISBN: 0-13-031399-8

Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Room B-067 Laboratory B-107L
Technology Resources (AV, data show, Smart Board, software, etc.)	data show multimedia system , PCs Headset and Microphone system.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment	Students	Direct
Focus group discussion with small groups of students.	Instructor	Direct
Extent of achievement of course learning outcomes	Instructor	Direct
The quality of learning resources	Program Leaders	Direct

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Department Council
Reference No.	14440729-0182-00018
Date	1444/08/01