اعتماد
NCAAA

T4

2020

Course Specifications

Course Title:	Multimedia Technology
Course Code:	CSI 521
Program:	B.Sc.
Department:	Computer Science and Information
College:	College of Science AL Zulfi
Institution:	Al Majmaah University

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Table of Contents

A. Course Identification

1. Credit hours:	
2. Course type	
a. University ☐ College ☐ Department ☐ Others ☐	
b. Required ☐ Elective ■	
3. Level/year at which this course is offered: 10th /	
4. Pre-requisites for this course (if any)**:** CSI 425	
5. Co-requisites for this course (if any)**:** None	

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	48	80 %
2	**Blended**	6	10 %
3	**E-learning**	6	10 %
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	30
2	**Laboratory/Studio**	20
3	**Tutorial**	10
4	**Others** (specify)	
	Total	60

B. Course Objectives and Learning Outcomes

1. Course Description

This course covers the design and implementation of the technologies used to implement interactive multimedia applications such as streaming video playback, video conferencing, interactive television, video editing, and hypermedia authoring. Fundamentals of human perception, digital media representations, compression and synchronization are covered. Implementation technologies including hardware architectures for media processing (e.g., processor, bus, and input/output devices), OS support, multimedia systems services, network architectures and protocols, and distributed programming services are also discussed.

2. Course Main Objective
1. Increasing the ability of the students to implement interactive multimedia applications such as streaming video playback
2. Using group discussion through the internet with course attending students.
3. Updating the materials of the course to cover the new topics of the field.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Understand possible uses and applications of multimedia	K1
1.2	Understand the basic forms of multimedia contents including digital images, audio, video, animations etc.	K2
1.3	Understand the basic tools and technologies that are involved in Multimedia Design	K3
2	**Skills :**	
2.1	Explain the core issues that are involved in Multimedia Design	S1
2.2	Design and implement multimedia contents in various forms.	S2
2.3	Be able to design and generate animations.	S2
3	**Values:**	
31	Work in a group and learn time management.	C1
3.2	Learn how to search for information through library and internet.	C2
3.3	Present a short report in a written form and orally using appropriate scientific language.	C2

C. Course Content

No	List of Topics	Contact Hours
1	Introduction and Usage of Multimedia: Define The Multimedia technology and The broad foundation of multimedia and human-computer interaction that defines the root of multimedia, Usage of Multimedia	4
2	Interaction Technologies and Devices: The study of the interactive technologies and devices that are essential for multimedia design.	12
3	Compression Technologies for Multimedia Learning the basis of compression algorithms that have made multimedia possible.	4
4	Multimedia in the form of Text, Images, Audio etc. Understanding the type of multimedia that is prevalent today	12
5	Computer Graphics and Image Editing The basics of Computer Graphics and Image editing are taught in this module.	8
6	Audio-Visual Media: Video and Animation The production and usage of works that involved audio, video and sound.	12
7	Multimedia Design Introduced to using adobe flash to make animations and program them using action script	8
	Total	60

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	Understand possible uses and applications of multimedia	Lectures, Individual presentations & Brainstorming exercises	Quiz , Mid Exam , Assignment, Final Exam, Individual demonstrations.
1.2	Understand the basic forms of multimedia contents including digital images, audio, video, animations etc.		
1.3	Understand the basic tools and technologies that are involved in Multimedia Design		
2.0	**Skills**		
2.1	Explain the core issues that are involved in Multimedia Design	Lectures, Individual presentations & Brainstorming exercises	Quiz , Mid Exam , Assignment, Final Exam, Individual demonstrations.
2.2	Design and implement multimedia contents in various forms.	Lectures, Individual presentations & Brainstorming exercises	Quiz , Mid Exam , Assignment, Final Exam, Individual demonstrations.
2.3	Be able to design and generate animations.		
3.0	**Values**		
31	Work in a group and learn time management.	Lectures, Individual presentations & Brainstorming exercises	Quiz , Mid Exam , Assignment, Final Exam, Individual demonstrations.
3.2	Learn how to search for information through library and internet.		
3.3	Present a short report in a written form and orally using appropriate scientific language.		

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes		10 %
2	Mid Exams		30 %
3	Assignments		10 %
4	Group Discussion, Presentation		10 %
5	Final Exam		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	McGloughlin, Multimedia Concepts and Practice, Prentice Hall , 2001.
Essential References Materials	Katherine Ulrich, Macromedia Flash MX 2004 for Windows and Macintosh: Visual Quick Start Guide, Peachpit Press, 2003
Electronic Materials	https://www.coursera.org/.
Other Learning Materials	Videos and presentations are available with instructor

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms and Labs as those that are available at college of science Az Zulfi
Technology Resources (AV, data show, Smart Board, software, etc.)	Smart Board and required software
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	N/A

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods

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	
Reference No.	
Date	