King Fahd University of Petroleum and Minerals
Information and Computer Science Department
ICS 490 - Special Topics I (Multimedia Computing)
First Semester 1999 - 2000 (991)

Instructor: Abdallah Al-Sukairi

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Course Objective:

Multimedia computing is rapidly advancing. This course will equip students with adequate knowledge about multimedia elements and standards. It will also address multimedia tools, development, programming, and applications.

Course Outline :

1	Introduction	
2	Platforms	2 weeks
	2-1 CD-ROM Standards	
3	Text	1 week
	3-1 Fonts	
	3-2 Hypertext	
4	Audio	2 weeks
	4-1 Digital Audio	
	4-2 Synthesized Audio & MIDI	
	4-3 Audio Compression	
	4-4 Audio on the Internet & Audio Streaming	
	4-5 Voice Recognition	
5	Images	2 weeks
	5-1 Image Formats	
	5-2 Color	
	5-3 Image Compression	
6	Animation	2 weeks
	6-1 2-D/3-D Animation	
	6-2 Frame-based animation	
	6-3 Cast-based animation	
7	Video	2 weeks
	7-1 Digital Video	
	7-3 Video Formats & Compression	
	7-4 Video on the Internet & Video Streaming	
	7-5 Videoconferencing	
8	Multimedia Tools	2 weeks
9	Multimedia Programming Techniques	2 weeks

Projects:

One individual and one group Windows-based multimedia applications.

Textbook:

Selected articles and papers.

Pre-requisite:

Senior standing.

Grading Policy:

Project I	20%
Project II	20%
Exam I	20%
Exam II	20%
Final Exam	20%