



Computer Science Department

Course Syllabus

CS429 - Multimedia Systems

Catalog Description: General Concept and Definition of Multimedia, Video and Audio Compression

Techniques, systems and standards, QoS Architecture, Multimedia Support in Shared

Media networks.

Credit Hours: 3 Credit hours: 3 Lectures per week 0 Labs. per week 0 Recitation per week

Prerequisites: CS242

Course Learning Outcomes:

1. Describe the ways in which multimedia is captured, processed and rendered.

2. Introduce multimedia quality of service (QoS) and compare subjective and objective

methods of assessing user satisfaction

3. Analyze the ways in which multimedia data is transmitted across networks

4. Discuss privacy and copyright issues in the context of multimedia.

Major Topics:

- Motor skills

- Perception and cognition

- Audio representations

- Audio transformation,

- Graphics representations

- Video representations

- Compression

- Prototyping

- Authoring tools

- Process management

- Multimedia file management

- Video servers

- Synchronization

Text Books:

• Required: Multimedia Systems Design, Andleigh and Thakrar, 1st edition, Prentice Hall, 1995.

• Optional: Fundamentals of Multimedia, Li and Drew, Prentice Hall, 2003.

· Optional: Multimedia Systems, Steinmetz and Nahrstedt, Springer, 2004.

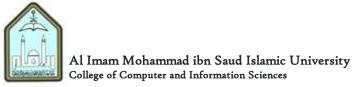
· Optional: Multimedia Systems, Koegel Buford, Addison-Wesley, 1994.

· Optional: Interactive Multimedia Systems, Mahbubur Rahman, Idea Group Inc, 2002.

• Optional: Handbook of Internet and Multimedia Systems and Applications, Furht and

Furht, CRC Press, 1999.

• Optional: Video and Image Processing in Multimedia Systems, Furht, Furht, Smoliar, and Zhang, Springer, 1995.





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Grading:

The grading scale for this course is:

. 95 - 100 A+ Passing

. 90 - 94 A Passing

. 85 - 89 B+ Passing

. 80 - 84 B Passing

. 75 - 79 C+ Passing

. 70 - 74 C Passing

. 65 - 69 D+ Passing

. 60 - 64 D Passing

.0 -59 F Failing

- Final grades will be determined based on the following components:
 - . 60% Semester Work
 - . 40% Final Exam
- © Students may not do any additional work for extra credit nor resubmit any graded activity to raise a final grade.
- Late submissions will not be accepted for any graded activity for any reason.
- © Studentshave one week to request the re-grading of any semester work.

Attendance Policy:

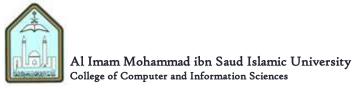
Students should attend 80% of the overall course hours taught in the semester as per the University regulations.

If a student fails to achieve this portion, he/she shall not be allowed to appear in the final exam and shall be awarded "DN" grade and repeat the course.

Cheating and Plagiarism Policy:

The instructor will use several manual and automated means to detect cheating and/or plagiarism in any work submitted by students for this course.

When a student is suspected of cheating or plagiarism, the instructor raises the issue to the disciplinary committee.





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Communications:

Registered students will be given access to a section of the Blackboard Learning System for this course. Bb will used as the primary mechanism to disseminate course information, including announcements, lecture slides, assignments, and grades.

Communication with the instructor on issues relating to the individual student should be conducted using CIS email, via telephone, or in person.