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Course Profile - Department of Information Technologies

Course Number : **IT 425**	Course Title : Multimedia Systems and Applications
Required / Elective : Elective	Pre / Co-requisites : Elementary signal processing, programming, and calculus
Catalog Description: Introduction to multimedia, integration of voice, text and video, multimedia tools and development environments, applications in education, tourism, culture, computer art.	Textbook / Required Material : **Various Sources:** 1) ***Multimedia Systems***, J. F. Koegel Buford, Contributing Editor, *Addison Wesley*, *1994.* 2) ***Multimedia: Computing, Communications and Applications*****,** Steinmettz R. And Nahrstedt K., Prentice Hall, 1995. 3) ***Multimedia Fundamentals: Media Coding and Content Processing***, Steinmettz R. And Nahrstedt K., Pentice Hall, 2002. 4) ***Multimedia Communication Systems: Techniques, Standards and Networks***, Rao K. R. Bojkovic Z. S., Milanovic D. A., Prentice Hall 2002. 5) ***Fundamentals of Multimedia***, Li Z. N. And Drew M. S., Prentice Hall, 2004.
Course Structure / Schedule : **(3+0+0) 3 / 6 ECTS**	
Extended Description : Two key goals will drive this course. i. Knowledge and thinking about concepts, approaches and types of multimedia systems ii. The ability of using appropriate knowledge, methods and techniques to a practical case in a project setting.	
Design content : analyzing and designing multimedia application	Computer usage: computer-supported prototyping tool for multimedia application

Course Outcomes:

After completing this course, students should:

- have solid understanding of fundamental concepts, alternative approaches for multimedia applications [2, 3]
- be able to facilitate analysis and development of multimedia ideas, required business plan and operations [2, 5, 8]
- be equipped with appropriate methods, techniques to cope with all stages of developing multimedia system [2, 3]
- have the knowledge of various types of multimedia systems [2, 7]
- have the knowledge of multimedia technologies, applications, protocols [2, 3]
- have the ability to reason through analysis, evaluation and design of multimedia systems [2,3,4]

Program Outcomes for Management Information Systems Program:

1. A foundation in mathematics and basic sciences and ability to apply acquired knowledge as they relate to the study and practice of information systems management.
2. An ability to align information technology, organizational and strategic matters.
3. An ability to propose, analyze, design, develop, test and maintain an information technology system including software solutions, security model, computer and network infrastructure, etc. to solve information systems problems.
4. An ability to analyze local and global impact of computing on individuals, organizations and society; and the ability to apply information systems techniques, skills, and tools for regular computing practices as well as to improve effectiveness of current methodologies.
5. An ability to effectively communicate in oral and written media with all kinds of related audiences; and prepare documentation for this purpose as required.
6. An understanding of professional, ethical, legal, and social issues and responsibilities of information systems management profession.
7. A taste and breadth of knowledge across several social topics outside the immediate requirements of the information systems management profession, and the ability to work within heterogeneous teams to accomplish a common goal including people from the information systems area as well as other disciplines.
8. An ability to engage in life-long learning and professional development for personal improvement to follow contemporary information systems issues.

Teaching methods

Pre-readings, case-studies, lectures, project

Assessment methods

1 Midterm exam	30%
1 Subject presentation	15%
1 Design project	20%
1 Final	30%

Student workload:

Preparatory reading	40 hrs
Lectures, workshop, discussions	45 hrs
Projects, presentations	50 hrs
Midterm Exam	6 hrs
Final Exam	9 hrs
TOTAL ……	**150 hrs**

Prepared by : Dr. F. Gurgen	Revision Date : Jul 18, 2010