



Course Specifications

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| Institution: | Majmaah University |
| Academic Department : | College of Science in Zulfi, Department of Computer Science and Information. |
| Programme : | Computer Science and Information |
| Course : | Multimedia Technology |
| Course Coordinator : | ..... |
| Programme Coordinator : | Associate Prof. Yosry Azzam. |
| Course Specification Approved Date : | 22/ 12 / 1435 H |



A. Course Identification and General Information

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|--|---|------------------|---------|
| 1 - Course title : | Multimedia Technology | Course Code: | CSI 521 |
| 2. Credit hours : | 3 (2+2) | | |
| 3 - Program(s) in which the course is offered: | Computer Science & Information | | |
| 4 – Course Language : | English | | |
| 5 - Name of faculty member responsible for the course: | ..... |  |  |
| 6 - Level/year at which this course is offered : | 10 th | | |
| 7 - Pre-requisites for this course (if any) : | <ul style="list-style-type: none"> • CSI 425 | | |
| 8 - Co-requisites for this course (if any) : | None | | |
| 9 - Location if not on main campus : | (College of Science in Zulfi) | | |
| 10 - Mode of Instruction (mark all that apply) | | | |
| A - Traditional classroom | <input checked="" type="checkbox"/> | What percentage? | 80% |
| B - Blended (traditional and online) | <input checked="" type="checkbox"/> | What percentage? | 10 % |
| D - e-learning | <input type="checkbox"/> | What percentage? | % |
| E – Correspondence | <input type="checkbox"/> | What percentage? | % |
| F - Other | <input checked="" type="checkbox"/> | What percentage? | 10 % |
| Comments : | | | |

B Objectives

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| <p>What is the main purpose for this course?</p> <p>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.</p> <p>Briefly describe any plans for developing and improving the course that are being implemented :</p> <ol style="list-style-type: none"> 1. Using group discussion through the internet with course attending students. 2. Updating the materials of the course to cover the new topics of the field. |
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C. Course Description

1. Topics to be Covered

| List of Topics | No. of Weeks | 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 | 2 | 6 |
| 2. Interaction Technologies and Devices: The study of the interactive technologies and devices that are essential for multimedia design. | 2 | 6 |
| 3. Compression Technologies for Multimedia Learning the basis of compression algorithms that have made multimedia possible. | 1 | 3 |
| 4. Multimedia in the form of Text, Images, Audio etc. Understanding the type of multimedia that is prevalent today | 2 | 6 |
| 5. Computer Graphics and Image Editing The basics of Computer Graphics and Image editing are taught in this module. | 2 | 6 |
| 6. Audio-Visual Media: Video and Animation The production and usage of works that involved audio, video and sound. | 1 | 3 |
| 7. Multimedia Design Introduced to using adobe flash to make animations and program them using action script | 3 | 9 |

2. Course components (total contact hours and credits per semester):

| | Lecture | Tutorial | Laboratory | Practical | Other: | Total |
|----------------------|-----------|----------|------------|-----------|--------|-----------|
| Contact Hours | 30 | ..... | 30 | ..... | ..... | 60 |
| Credit | 30 | ..... | 15 | ..... | ..... | 45 |



3. Additional private study/learning hours expected for students per week.

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The private self-study of my student is crucial for this course. It includes:

- Reading carefully the topics in the textbook or reference book,
- Browsing the websites related to the course,
- Solving the exercises that are assigned in each chapter,
- Discussing the course topics with the instructor in his office hours,
- Watching related video lectures.

The total workload of the student in this course is then: $60 + 5 * 15 = 135$ work hours.

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

| | NQF Learning Domains And Course Learning Outcomes | Course Teaching Strategies | Course Assessment Methods |
|--|---|---|--|
| 1.0 Knowledge | | | |
| 1.1 | Understand possible uses and applications of multimedia | Lectures | Written Exam |
| 1.2 | Understand the basic forms of multimedia contents including digital images, audio, video, animations etc. | Lab demonstrations | Homework assignments |
| 1.3 | Understand the basic tools and technologies that are involved in Multimedia Design | Case studies Individual presentations | Lab assignments Class Activities Quizzes |
| 2.0 Cognitive Skills | | | |
| 2.1 | Explain the core issues that are involved in Multimedia Design. | Lectures Lab demonstrations | Written Exam Homework assignments |
| 2.2 | Design and implement multimedia contents in various forms. | Case studies | Lab assignments |
| 2.3 | Be able to design and generate animations. | Individual presentations Brainstorming | Class Activities Quizzes |
| 3.0 Interpersonal Skills & Responsibility | | | |
| 3.1 | Work in a group and learn time management. | Small group discussion | Written Exam |
| 3.2 | Learn how to search for information through library and internet. | Whole group discussion | Homework assignments |
| 3.3 | Present a short report in a written form and orally using appropriate scientific language. | Brainstorming Presentation | Lab assignments Class Activities Quizzes |





| | NQF Learning Domains And Course Learning Outcomes | Course Teaching Strategies | Course Assessment Methods |
|------------|---|----------------------------------|---------------------------------|
| 4.0 | Communication, Information Technology, Numerical | | |
| 4.1 | Communicate with teacher, ask questions, solve problems, and use computers. | Small group discussion | Written Exam Homework |
| 4.2 | Use Information technology and computer skills to gather information about a selected topic. | Whole group discussion | assignments Lab assignments |
| 4.3 | Operate questions during the lecture, work in groups, and communicate with each other and with me electronically, and periodically visit the sites I recommended. | Brainstorming Presentation | Class Activities Quizzes |
| 5.0 | Psychomotor | | |
| 5.1 | ..... | ..... | ..... |
| 5.2 | ..... | ..... | ..... |
| 5.3 | ..... | ..... | ..... |

5. Schedule of Assessment Tasks for Students During the Semester:

| | Assessment task | Week Due | Proportion of Total Assessment |
|---|--|------------------------|--------------------------------------|
| 1 | First written mid-term exam | 6 | 15% |
| 2 | Second written mid-term exam | 12 | 15% |
| 3 | Presentation, class activities, and group discussion | Every week | 10% |
| 4 | Homework assignments | After Every chapter | 10% |
| 5 | Practical exam | 15 | 10% |
| 6 | Final written exam | 16 | 40% |
| 7 | Total | | 100% |

D. Student Academic Counseling and Support

1. 6-office hours per week in the lecturer schedule.
2. The contact with students by e-mail , mobile, office telephone and website.





E. Learning Resources

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| 1. List Required Textbooks : McGloughlin, Multimedia Concepts and Practice, Prentice Hall , 2001. |
| 2. List Essential References Materials : Katherine Ulrich, Macromedia Flash MX 2004 for Windows and Macintosh: Visual Quick Start Guide, Peachpit Press, 2003 |
| 3. List Recommended Textbooks and Reference Material : None |
| 4. List Electronic Materials : https://www.coursera.org/ . |
| 5. Other learning material : Video and presentations that are available with the instructor. |

F. Facilities Required

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| 1. Accommodation <ul style="list-style-type: none">• Class Rooms• Computer Labs• Library |
| 2. Computing resources <ul style="list-style-type: none">• Smart Board |
| 3. Other resources None |

G Course Evaluation and Improvement Processes

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| 1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching: <ul style="list-style-type: none">• Analysis of students' results.• Observation during work.• Students' evaluations.• Colleagues' evaluations.• Evaluation questionnaire filled by the students.• Interview a sample of students enrolled in the course to take their opinions. |
| 2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor : <ul style="list-style-type: none">• Self-assessment.• External evaluation.• Periodic review of course (the Commission of study plans). |
| 3 Processes for Improvement of Teaching : <ul style="list-style-type: none">• Taking into account the recommendations yielded from the internal review of |





the course.

- Guidelines about course teaching provided by the by study plans commission.
- Department Guidelines about faculty member performance on the basis of direct observation.
- Training and development.
- Workshops to improve the educational process.

4. Processes for Verifying Standards of Student Achievement

Instructors of the course working together with Head of Department to adopt a unique process of the evaluation.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement :

- Comparison of the course to its counterparts offered in similar departments.
- Periodic revision of course description by faculty member.
- Periodic revision of course description by the study plans and schedules Commission.
- Update learning resources related to the course to ensure that the course is kept up with developments in the field.
- Make use of statistical results of course evaluation made by students to improve and develop the course.
- Giving the opportunity for students to express their opinions about what is taught and receive suggestions and study their effectiveness.

Course Specification Approved
Department Official Meeting No (.....) Date ... / / H

Course's Coordinator

Name :

Signature :

Date : / ... / H

Department Head

Name : Associate Prof. Yosry
Azzam

Signature :

Date : / ... / H

