

Zarqa University
Faculty: Information Technology
Department: Computer Information Systems
Course title: Computer Assisted Learning Course
Number:(1502261)



Instructor:
Lecture's time:
Semester: First
Office Hours:

Program Name:	CS (Elective), CIS (Elective)	
Credit Hours:	3	
Prerequisite:	Number	Title
	0306131	Computer Applications & Internet.
Co-Requisite:	None	
Other Prerequisites:	None	
Recommended Semester:	Second Semester/Forth Year	
Teaching Language:	English	
Last Updated:	20/07/2014	

Aims of the Course

This course shows how to use computers in educational settings by combining learning theory and instructional strategies to help the student design software for learning and instruction.

Intended Learning Outcomes (ILOCs):

On completion of the module a student will be expected to be able to:

- Gain an understanding of issues and concepts involved in the design of instructional multimedia;
- Explore some concepts related to screen design and information presentation;
- Gain an overview about the methodologies to computer assisted learning;
- Able to design and develop an instructional application using multimedia tools.

METHODS OF TEACHING:

45 - 1 hour/or/ 30 - 1.30 hour lectures

Students are expected to undertake approximately 100 hours of private study, including coursework, reviewing lecture notes and other material plus submitting a project at the end of semester.

ASSESSMENT:**Written Examination: Percentage Contribution to the Course Assessment: 70 %**

Mid:	30 %
Final:	50 %

In-course Assessment: Percentage Contribution to the course Assessment: 20 %

Project Work:	10 %
Quiz Test:	} 10 %
Coursework:	
Homework:	

Detailed SYLLABUS CONTENT:**I. Part one (Introduction to CAL)**

- 1- Introduction: A Short History, When to Use the Computer to Facilitate Learning, The Process of Instruction, Methodologies for Facilitating Learning. (Chapter 1 – 3 Hrs)
- 2- General Features of Software for Learning: Learner Control of a Program, Presentation of Information, Providing Help, Ending a Program. (Chapter 3 – 4.5 Hrs)

II. Part two (Methodologies in CAL) [Three topics/chapters/ out of the following]:

- 1- Tutorials: Questions and Responses, Judgment of Responses, Feedback about Responses, Remediation, Organization and Sequence of Program Segments. (Chapter 4 - 6 Hrs)
- 2- Hypermedia: Structure of Hypermedia, Hypermedia Formats, The Hypermedia Database, Navigation and Orientation, Support for Learning and Learning Strategies. (Chapter 5 - 6 Hrs)
- 3- Drills: Basic Drill Procedure, The Introduction of a Drill, Item Characteristics, Item Selection and Queuing Procedures, Feedback, Item Grouping Procedures, Motivating the Learner, Data Storage and Program Termination, Advantages of Multimedia Drills. (Chapter 6 - 6 Hrs)
- 4- Simulations: Types of Simulations, Advantages of Simulations, Factors in Simulations, Simulation Design and Development. (Chapter 7 - 6 Hrs)
- 5- Tests: Computerized Test Construction, Computerized Test Administration, Factors in Tests, Other Testing Approaches in the Computer Environment, Security. (Chapter 10 - 6 Hrs)

III. Part three (DESIGN and DEVELOPMENT)

- 1- Overview of a Model for Design and Development: Standards, Ongoing Evaluation, Project Management, Planning, Design, Development, Establishing Expectations, The Evaluation Form. (Chapter 12 - 3 Hrs)
- 2- Planning: Scope, Characteristics, Constraints, Cost, Planning Document, Style Manual, Resources, Brainstorming, Look and Feel of the Project, Client Sign-Off. (Chapter 13 – 4.5 Hrs)
- 3- Design: Purpose, Audiences, Content Ideas, Task and Concept Analyses, Program Description, Detailing, Prototypes, Flowcharts, Storyboards, Scripts, Ongoing Evaluation, Client Sign Off. (Chapter 14 – 6 Hrs)
- 4- Development: Project Management, Text Components, Program Code, Graphics, Video, Audio, Assemble the Pieces, Support Materials, Alpha Testing, Revisions, Beta Testing, Final Revisions, Client Sign-Off, Validating the Program. (Chapter 15 – 6 Hrs)

READING LIST:

Text Book

- "MULTIMEDIA for LEARNING- Methods and Development". Stephen Alessi, Stanley Trollip 3rd edition 2001, Allyn and Bacon.

RECOMMENDED:

- AuthorWare, Introduction to multimedia, Simon Hooper.