



Sultan Qaboos University
College of Education
Department of Instructional & Learning Technologies

SYLLABUS: TECH6101: Instructional, Information & Communication Technologies

Course Type	College Requirement
Prerequisite	None
Credit Hours	3
Contact Hours	4 hours (2 hours lecture + 2 hours lab)
Instructor	Dr. Alaa Sadik Ph.D., University of Hull, UK, 2002 E-mail: alaasadik@squ.edu.om Web Site: www.alaasadik.net Ext. 2414 3988 Office: College of Education, ILT Department, Room 1078

Course Description

This course is designed for M.Ed. students and focuses on the educational uses of information & communication technology (ICT) and its roles in the educational environment. This practical course balances fact, theory and application as it examines the ICT role in education as a tool of the mind. It presents theories and models relating to ICT-assisted instruction and discusses strategies for using computers in education settings, demonstrates practical applications and closes with a discussion of management and administrative concerns.

Course Objectives

By the end of this course, you should be able to:

1. Show awareness of the different uses of ICT in teaching and learning.
2. Identify the relationship between instructional design, learning theories and ICT.
3. Identify and implement strategies for the integration of ICT into schools and other educational settings; increase sensitivity to attitudinal and apply instructional design principles in the evaluation and selection of existing software for educational uses; develop appropriate software evaluation forms for the review of commercial materials.
4. Uses authoring tools to develop ICT applications.
5. Assess important issues related to ICT in education: the role of ICT in home and school, equity issues; future trends and new developments.
6. Demonstrate competence in using ICT applications (e.g. databases, spreadsheets, presentation packages, multimedia, problem solving, multimedia and the Internet) for in educational settings.
7. Recognise advancement in the field of e-learning and distance education.

Course Activities

- Lecture and discussions
- Mediated presentations
- Hardware and software demonstrations
- Lab activities - hands-on computer experience

Expectations

- Attend all of the course classes. Attendance will be taken every class. Absent student is responsible for obtaining the information covered in

lecture from other students or through an out-of-class appointment with Dr. Alaa Sadik.

- Complete all of the reading and review other resources as required.
- Complete all assignments to the best of your ability
- Submit assignments ON TIME.
- Participate in class through discussions and presentations.
- Participate asynchronously through email, forum discussions and blogs.
- Cooperate with other students through face-to-face or some sort of informal assignments.
- Contact Dr. Alaa Sadik if any question arise about what is expected or about how to use technology that is necessary to complete assignment

Course Content and Schedule *

Spring Semester 2007/2008

Week	Topic and Activity
1	Introduction: ICT in Education
2	Educational Technology Standards NETS-S (for students, ISTE) NETS-S (for teachers, ISTE)
3	Perspectives on Teaching, Learning & Technology
4	Types of ICT Tools Informative tools, Situating tools, Constructive tools & Communicative tools
5	Instructional Design & Technology
6	ICT Integration into Education I Computer applications, simulation & problem-solving
7	ICT Integration into Education II Hypertext, multimedia & hypermedia

Week	Topic and Activity
8	ICT Integration into Education III The Internet & the Web
9	Mid-Term Exam
10	Distance Education & e-Learning
11	Learning Objects & e-Learning
12	Integrating Technology into the Curriculum I: Math & Science
13	Integrating Technology into the Curriculum II: Social Studies & Language
14	Submission, Presentation and assessment of assignments
15	Revision and discussions

** These activities are subject to change depending on class interest and progression*

Course Assessment

Student work will be evaluated based upon the assignments and digital artifacts submitted. This course will involve both individual and group assignments. Rubrics will be used to provide students with an understanding of teacher expectations for each assignment. It is the student's responsibility to refer to the rubric as well as the assignment explanation to best understand teacher expectations. While the course instructor does his best to make the rubrics and assignment descriptions understandable, sometimes the words don't convey the intended information and a misunderstanding may occur. Please contact Dr. Alaa Sadik about any questions you may have.

1. Individual and group-based presentation (*on one of the topics mentioned above to be developed and presented by students during the course from week 2 to week 13*). (5%)
2. Mid term exam (*written exam including short answer, multiple-choice, true/false questions, week 7*). (15%)

3. Digital portfolio (*including a production of multimedia presentations, interactive tools, databases, spreadsheets, Web sites, Word documents, images, video, etc.*) stored on a CD (to be developed throughout the course and evaluated by the end of week 14. Late portfolios will lose 5% of the final grade for each day late including weekends. A student who is found using materials or tools produced by others improperly will be penalised). (15%)
4. Short written assignment (1300-1500 words, printed assignment on classroom applications of the computer and the Internet, e.g. e-learning, multimedia, computer & special education...), submitted by the end of Week 7. Late assignments will lose 5% of the final grade for each day late including weekends. A student who is found using scholarly work improperly will be penalised). (10%)
5. Long written assignment (2000-2300 words, printed assignment on ICT, educational technology standards & learning), submitted by the end of Week 12. Late assignments will lose 5% of the final grade for each day late including weekends. A student who is found using scholarly work improperly will be penalised). (15%)
6. Final exam (written exam including short answer, multiple-choice, true/false questions). (40%)

Suggested Resources

Books available at SQU Main Library

Title: Microcomputers in education
 Editor: I.C.H. Smith
 Publisher: Chichester: Horwood, 1982

Title: Teachers, computers, and the classroom
 Editor: Ivan Reid and James Rushton
 Publisher: Manchester: Manchester University Press, 1985

Title: The educational software selector
 Author: TESS / EPIE Institute
 Publisher: New York: Teachers College Press, 1984

Title: Young people, creativity and new technologies : the challenge of digital arts
Editor: Julian Sefton-Green
Publisher: London : Routledge, 1999

Title: Using information technology effectively in teaching and learning : studies in pre-service and in-service teacher education
Editor: Bridget Somekh
Publisher: London : Routledge, 1997 London : Routledge, 1997.

Title: Teaching with computers : a new menu for the '90s
Author: Mary Jo Langhorne et al
Publisher: London: Page, 1989

Title: Software for educational computing : a general-purpose driver for computer-assisted instruction, interrogation and system simulation
Author: K. Ahmed, D. Ingram, C.J. Dickinson
Publisher: Lancaster: MTP Press, 1980

Title: Learning and teaching with computers : artificial intelligence in education
Author: Tim O'Shea, John Self
Publisher: Brighton, Sussex: Harvester Press, 1983

Web Resources

The Integration of Computer Technology into the Curriculum
<http://www.lausd.k12.ca.us/lausd/resources/integration>

Computer-Assisted Instruction
<http://www.nwrel.org/scpd/sirs/5/cu10.html>

An Introduction to Computer Based Instruction
http://scs.une.edu.au/573/573_1.html

The Computer as an Educational Tool: Productivity and Problem Solving
<http://www.prenhall.com/forcier>

