



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

## **SYLLABUS**

### **TECH3008: Introduction to Educational Technology**

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

#### **Course Description**

This course is designed for English specialization 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 teaching and learning English language.

## **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 \*

Fall Semester 2008/2009

Week	Date	Topic and Activity
1	6/9/2008	 Educational Technology Standards
2	13/9/2008	 Visual Principles I: Types of instructional images  Copying Images Worksheet
3	20/9/2008	 Audio-Visual Media: Preparing your Class Presentation  Using PowerPoint to prepare OHP transparencies
4	27/9/2008	Eid AlFitr
5	4/10/2008	 Visual Principles II: Visual Literacy  Visual literacy exercises
6	11/10/2008	 Photography and Visuals  Designing digital stories using Photo Story 3.0
7	18/10/2008	 Instructional Systems, Dale's Cone of Experience and ASSURE Model  ASSURE Model: School textbook-based application

Week	Date	Topic and Activity
8	25/10/2008	 Computer Applications in Teaching and Learning  Word processing and language education
9	1/11/2008	 Computers: Applications: Multimedia  Designing Interactive Presentations using PowerPoint
10	8/11/2008	 Distance Education  Preparing audio materials for distance students
11	15/11/2008	 Online Learning  Designing online materials
12	22/11/2008	 Media and Technology Used in Distance Education and Online Learning I: Broadcasting Radio & Television and Telephone  Audio editing
13	29/11/2008	 Media and Technology Used in Distance Education and Online Learning II: Computers and the Internet  Photo editing
14	6/12/2008	 Students' Presentations and Assignments: Feedback  Video editing
15	13/12/2008	Revision and discussions
		 Theoretical section/lecture  Practical section/lab

*\* 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. Group-based presentations (*on one of the topics mentioned in week 3 to be developed and presented by students during the course from week 6 to week 14*). (5%)
2. 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*). (30%)
3. 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*). (5%)
4. Mid term exam (*Week 8*) (20%)
5. Final-term exams (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](http://scs.une.edu.au/573/573_1.html)

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

## Evaluation and Requirements

One of the specific educational goals of this course is to achieve technological competence, by which is usually meant facility with the tools of information technology. Here are some techniques that will encourage the achievement of this goal. A particularly attractive factor of these techniques is that most are self-assessing: completion of the assignment by the student demonstrates that the student can use the tool or perform the skill (Harris, 2004 <sup>(\*)</sup>).

1. Use email to send at least some of their homework, papers, projects, comments, questions, or assessments. A useful assignment is to have students write and mail a narrative evaluation of a paper, reading, or class session they completed. Email can be used effectively by requiring students to submit paper topics early in the term. The instructor can simply use the reply function to make comments and suggestions.
2. Get assignments online. Post assignments or other information on a web page, intranet page, or shared drive folder. Particular sites with pertinent information might be mentioned in class or listed in an assignment or syllabus, with the requirement that students visit them and obtain certain information from them.
3. Use electronic reserves. Instead of photocopying materials for library reserves, put those readings on your class web page for students to read. That way, students do not have to go to the library to read the reserve material, several students can read it at the same time, and you can leave it on reserve indefinitely or update it regularly. The electronic format not only gives students practice in using technology, but it can simplify their use of the material by allowing them to cut and paste quotations with their word processor.
4. Search the Internet and make use of one or more Internet sources as part of their research assignments. Books, journals, newspapers, magazines, organizational sites, corporate sites, museums, and a host of other information sources provide a truly staggering amount of useful information. (But plan also to discuss source evaluation with your students because some show a surprising lack of caution in accepting as true whatever they find. As part of their research, you might have them locate some articles on the Net relating to source evaluation or direct them to my article, "Evaluating Internet Research Sources".)
5. Make use of one or more articles in electronic form as part of their research assignments. These forms are usually on CD-ROM and include encyclopedias, magazines, newspapers, and various abstracts and databases.

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<sup>(\*)</sup> Harris, R. (2004): Encouraging Students to Use Technology, available at <http://www.virtualsalt.com/techuse.htm>

6. Find research information through other specified technologies, such as online library catalogs, CD-ROM indexes, microform materials, videocassette sources, etc.
7. Subscribe to an Internet mailing list relevant to the class and to turn in one or more useful postings together with an evaluation of it and the mailing list in general. You might even require that the students propose a posting of their own.
8. Use word processing software. Require the use of some additional functions, such as headlines or subheads, font changes, drop caps, tables, graphs, inserted pictures, boxes, and so on. Help students to stretch themselves and their knowledge of how the word processor can help them present information in a clearer, more effective way. (Note: Make the requirements specific to the skill you want demonstrated. For example, "Present your data in an outlined table inserted into the text and not attached at the end").
9. Use presentation technology such as overhead projectors, data projectors, presentation software, or VCR's for assigned in-class presentations.
10. Create their own Web pages and to post their papers or reports to them. Not only will they learn to use technology for the dissemination of information, but they will have a lesson in sharing and perhaps be more motivated by the thought of a larger audience than the instructor.
11. Presentations are used as a summative assessment activity at the end of course. Organize and deliver a presentation at a final symposium. Students should analyze what is needed for a specific purpose and bring together various elements into a whole. They record the material in a manner they have chosen that will best display their learning process. They communicate to an audience what they have learned through visual, audio means. In becoming involved with a presentation, students interact with the material they are learning. A presentation should accompany a written report (assignment 2) as part of a major project. Students may choose their topics or they may be related to ongoing units of work.