



UNSW
A U S T R A L I A

Arts & Social
Sciences

School of Education

EDST5105

Design and Evaluation of ICT-based learning

Summer Semester

Contents

1. LOCATION.....	2
2. STAFF CONTACT DETAILS.....	2
3. COURSE DETAILS.....	2
<i>Summary of Course</i>	2
<i>Aims of the Course</i>	2
<i>Important Information</i>	2
<i>Student Learning Outcomes</i>	3
<i>Graduate Attributes</i>	3
4. RATIONALE FOR THE INCLUSION OF CONTENT AND TEACHING APPROACH.....	3
5. TEACHING STRATEGIES	4
6. COURSE CONTENT AND STRUCTURE	4
7. ASSESSMENT	5
<i>Assessment Details</i>	5
8. RESOURCES	10
<i>Suggested Readings</i>	10

IMPORTANT :

For student policies and procedures relating to assessment, attendance and student support, please see website, <https://education.arts.unsw.edu.au/students/courses/course-outlines/>

The School of Education acknowledges the Bidjigal and Gadigal people as the traditional custodians of the lands upon which we learn and teach.

1. LOCATION

Faculty of Arts and Social Sciences
School of Education
EDST5105 Design and Evaluation of ICT-based Learning (6 units of credit)
Summer Semester, 2016

2. STAFF CONTACT DETAILS

Course Coordinator: Sandra Phillips
Office Location: Room 119, John Goodsell Building
Email: sandy.phillips@unsw.edu.au
Phone: 0433042408
Availability: Please email to arrange an appointment

3. COURSE DETAILS

Course Name	Design and Evaluation of ICT-based Learning
Credit Points	6 units of credit (uoc)
Workload	Includes 150 hours including class contact hours, readings, class preparation, assessment, follow up activities, etc.
Schedule	4, 5, 7, 8 January 2016 9.30am – 4.30pm Mathews 211

Summary of Course

The course introduces students to the theoretical foundations and organisational issues of educational technologies and e-learning. It aims to develop students' skills in conceptualising and designing effective and engaging ICT-based learning in technology-enhanced environments. The course covers principles of evaluation of educational devices and software, mobile technology applications and web-based resources. Students will be expected to show a critical understanding of the relationships between context, purpose and technology through developing e-learning resources that incorporate explicit design principles and media selection rationales as well as innovative instructional techniques into teaching and learning modules.

The main ways in which the course has changed since last time as a result of student feedback are:

- **Connection to planning and curriculum design for contemporary learning.**
- **Clarity around the Digital Portfolio required assessment tasks.**

Aims of the Course

The course aims to:

- develop students' understanding of the theories underlying effective design and evaluation of ICT-based learning
- explore pedagogies of teaching and learning in e-learning environments
- provide students with opportunities to apply e-learning theories and developed skills to their own learning areas through the design and development of a learning plan and curriculum materials

Important Information

Assessment: Students must pass ALL assignments in order to pass the course. Only by passing all assignments can the Graduate Attributes be achieved.

Attendance: Students are expected to give priority to university study commitments. Unless specific and formal permission has been granted, failure to attend 80% of classes in a course may result in failure

Student Learning Outcomes

Outcome		Assessment/s
1	Demonstrate understanding of the key principles and theories of ICT-based learning and to analyse these in relation to their own teaching contexts	1, 3
2	Evaluate a range of educational technology resources and assess their use in a variety of contexts	2, 3
3	Apply principles and learning theories of e-learning to plan and design e-learning activities that align with curriculum structures (frameworks and assessment) of their teaching/learning contexts (or for those not currently teaching, for an intended audience within their professional contexts)	2, 3
4	Locate, evaluate and use technology resources for ongoing self-directed professional development and lifelong learning	2, 3

Graduate Attributes

Standard		Assessment/s
	Advanced disciplinary knowledge and practices	
1	Demonstrate an advanced understanding of the field of education as it relates to their specialist area of study, and the ability to synthesise and apply disciplinary principles and practices to new or complex environments.	2, 3
	Enquiry-based learning	
2	Demonstrate an in-depth understanding of research-based learning and the ability to plan, analyse, present implement and evaluate complex activities that contribute to advanced professional practice and/or intellectual scholarship in education	1, 2, 3
	Cognitive skills and critical thinking	
3	Demonstrate advanced critical thinking and problem solving skills	1,2, 3
	Communication, adaptive and interactional skills	
4	Communicate effectively to a range of audiences, and be capable of independent and collaborative enquiry and team-based leadership	1,2, 3
	Global outlook	
5	Demonstrate an understanding of international perspectives relevant to the educational field	1,3
	Ethics	
6	Demonstrate an advanced capacity to recognise and negotiate the complex and often contested values and ethical practices that underlie education	2, 3

4. RATIONALE FOR THE INCLUSION OF CONTENT AND TEACHING APPROACH

Designing and evaluating ICT-based learning materials require an understanding of how people learn. Students will be exposed to learning theories and principles applicable to learning in technology-enhanced environments. By analysing a range of ICT resources, students will be able to apply principles of instructional design to evaluate their effectiveness. Students will apply their understanding developed in the course to plan and design ICT-based resources that are pedagogically sound and applicable in their teaching contexts.

5. TEACHING STRATEGIES

A student-centred, seminar-based approach will form the basis of the course. The teaching strategies used during the course will include:

- interactive lectures to provide explicit instructions about the theoretical aspects of selecting and evaluation instructional technology and demonstrations of different approaches to integrating technology into learning and teaching
- hands-on approach where students explore resources for instructional design, research and contemporary learning.
- discussions in small groups and whole class to share the diversity of thinking and best practice.
- opportunities that encourage students to reflect critically and communicate on issues discussed

6. COURSE CONTENT AND STRUCTURE

2016		Lecture Topic
	9:30 am -12:30 pm	Introduction. Basic concepts of educational technology
	1:30 pm – 4:30 pm	Students: habits, characteristics: and learning with digital technology Learning frameworks and digital literacy Affordances of digital technologies
	9:30 am -12:30 pm	Exploring eLearning tools and online spaces to support contemporary learning & teaching
	1:30 pm – 4:30 pm	Evaluating digital resources
Wednesday 6 January – No Class		
	9:30 am -12:30 pm	Trends in technology : Flipped classroom, 1 - to -1 and BYOD
	1:30 pm – 4:30 pm	Teachers: Instructional design of technology-based learning Assessing technology- based learning
	9:30 am -12:30 pm	Presentations (recorded)
	1:30 pm – 4:30 pm	Explore host platforms for digital portfolio development

7. ASSESSMENT

Assessment Task	Length	Weight	Task (~hrs)	Learning Outcomes Assessed	Graduate Attributes Assessed	Due Date
1. Pre-course task: Integrating digital technology into planning for contemporary learning.	Equivalent to approx 1200 words	20%	~15 hrs	1	2, 3, 4, 5	Wednesday 30 Dec 2015
2. Presentation task: Instructional technology resources evaluation	Equivalent to approx. 900 words	15%	~12 hrs	2,3,4,	1,2,3,4,6	Day 4 Friday 8 Jan 2016
3. Design and develop a digital portfolio for an ICT-based learning module	Equivalent to approx. 3900 words	65%	~60 hrs	1, 2, 3, 4	1, 2, 3, 4, 5,6	Monday 22 Jan 2016

Assessment Details

Task 1. Pre-course task: Integrating digital technology in education

This **1200 word equivalent** assignment requires you to

1. read the literature about the current views and status of digital technology in education. Some papers will be recommended for your reading in the shared Google folder (link inside Moodle) but it is expected that you research further for information that will help you understand more about the area(s) that you are focusing on.
2. prepare a planned unit of work in your area of teaching which uses digital technologies to deepen the learning of students (consider the impact of 1 - to - 1 access) with a description of how the inclusion of activities and resources improves learning opportunities for students.
3. reflect on your teaching or current work and describe how you are using digital technology in your teaching or work that relates to education. Listed below are some guiding points to help you:
 - the context of your teaching situation or the kind of job that you are/will be doing that is connected to education
 - the characteristics of the learners that you are working with
 - what is digital literacy, its role in your use of technology and in education generally, and why it is important
 - what your thoughts are on the requirements to use digital technology effectively in your teaching and the students' learning

Task 2. Presentation task: Instructional technology resources evaluation

This assignment requires you to:

- demonstrate the ability to apply theory-based evaluation knowledge and skills to technology resources in an area of teaching interest. Select 2 (substantial) instructional technology resources in your discipline area and undertake an evaluation of their effectiveness in promoting learning.
- provide a framework upon which your evaluation is based – it is expected that a synthesis of your understanding of theories and principles of ICT-based learning to analyse these resources is demonstrated.
- complete with any specific ideas for implementation in contemporary classrooms. NB these presentations will be filmed and shared only by the lecturer and tutor of this course.

Task 3. Design and develop a website for an ICT- based learning module

This assignment requires you to demonstrate your:

- ability to use theories and principles studied and
- understanding of the multiple ways of using instructional technology to design ICT-based curriculum, justifying why you think your design is effective. Show how the resource/module fits in with curriculum statements, frameworks and assessment structures of the teaching and learning context. Examples of items to include in your module are
 - initial engagement activity(ies)
 - evidence of acknowledgement of your learners and their prior learning
 - at least 4 learner activities that use different eLearning strategies and eLearning tools (these are the tools that you use as a teacher to engage students or the ones that you ask your students to use as they work on the activities in your learning module)
 - at least one assessment task that is computer-based
 - accompanying your module will be a description (short essay) of the theories/principles that you have used in the planning and designing of the module. A justification of why the sequence of learning is effective is also required. Include this short essay on your website

All students are required to submit assessments on Turnitin via Moodle. The format of submission for the digital portfolio is the URL. This must be submitted via Turnitin.

UNSW SCHOOL OF EDUCATION
FEEDBACK SHEET
EDST5105 DESIGN AND EVALUATION OF ICT-BASED LEARNING

Student Name:

Student No.:

Assessment Task: **Task 1. Pre-course task**

SPECIFIC CRITERIA	(-)	—————>			(+)
Understanding of the tasks or issue and the key concepts involved <ul style="list-style-type: none"> • Evidence that demonstrates the different components of the task are addressed (2) 					
Depth of understanding of theories in response to the task Quality of the ideas and authentic use of the technologies to enhance student learning (6) <ul style="list-style-type: none"> • Relevance of the technologies included in the planned curriculum unit • Applications for students which enabled them to create , collaborate, think and/or communicate authentically. 					
Familiarity with and relevance of professional and/or research literature used to support response <ul style="list-style-type: none"> • Quality of the reflection and its relationship to the literature (6) 					
Structure and organisation of response <ul style="list-style-type: none"> • Coherence (i.e. structure and organisation) of the planned unit produced (2) 					
Presentation of response according to appropriate academic and linguistic conventions <ul style="list-style-type: none"> • Clarity in communicating the requirement of the task (1) • Clarity and appropriateness of sentence structure and vocabulary in report (1) • Correct referencing (2) 					
GENERAL COMMENTS/RECOMMENDATIONS FOR NEXT TIME 					

Lecturer

Date

Recommended: /20 (FL PS CR DN HD)

Weighting: 20%

NB: The ticks in the various boxes are designed to provide feedback to students; they are not given equal weight in determining the recommended grade. Depending on the nature of the assessment task, lecturers may also contextualize and/or amend these specific criteria. **The recommended grade is tentative only, subject to standardisation processes and approval by the School of Education Learning and Teaching Committee.**

UNSW SCHOOL OF EDUCATION
 FEEDBACK SHEET
 EDST5105 DESIGN AND EVALUATION OF ICT-BASED LEARNING

Student Name:

Student No.:

Assessment Task:

Task 2. Presentation: Instructional technology resources evaluation

Developing this criteria is part of the evaluation process for students. Each specific criteria will be determined through collaboration with students.

*****Using the stems in the assessment sheet below as bases, the class will discuss and determine the appropriate indicators for each stem.*****

SPECIFIC CRITERIA	(-) —————▶ (+)				
Understanding of the question or issue and the key concepts involved •					
Depth of analysis and/or critique in response to the task •					
Familiarity with and relevance of professional and/or research literature used to support response •					
Structure and organisation of response •					
Presentation of response according to appropriate academic and linguistic conventions •					
GENERAL COMMENTS/RECOMMENDATIONS FOR NEXT TIME					

Lecturer

Date

Recommended: /20 (FL PS CR DN HD)

Weighting: 15%

UNSW SCHOOL OF EDUCATION
 FEEDBACK SHEET
 EDST5105 DESIGN AND EVALUATION OF ICT-BASED LEARNING

Student Name:

Student No.:

Assessment Task: **Task 3. Design and develop a digital portfolio for an ICT- based learning module**

SPECIFIC CRITERIA	(-) → (+)				
Understanding of the question or issue and the key concepts involved <ul style="list-style-type: none"> • Identifying issues and key concepts 					
Depth of analysis and/or critique in response to the task <ul style="list-style-type: none"> • Use theory-based principles to plan and design the eLearning sequences in the module • Demonstrate multiple ways of using eLearning tools to create activities that support learning (e.g. promote higher order thinking, collaboration, etc) • Clarity and relevance of the activities • Authenticity of task and engagement level 					
Familiarity with and relevance of professional and/or research literature used to support response <ul style="list-style-type: none"> • Appropriate selection of resources • Quality of essay, including evidence of the critical use of the literature 					
Structure and organisation of response <ul style="list-style-type: none"> • Evidence of preparation • Competency in use of eLearning tools (e.g. layout, navigation) and in the creation of the website 					
Presentation of response according to appropriate academic and linguistic conventions <ul style="list-style-type: none"> • Clarity in communication • Clarity and appropriateness of sentence structure and vocabulary in report • Correct referencing 					
GENERAL COMMENTS/RECOMMENDATIONS FOR NEXT TIME					

Lecturer

Date

Recommended: /20 (FL PS CR DN HD)

Weighting: 65%

NB: The ticks in the various boxes are designed to provide feedback to students; they are not given equal weight in determining the recommended grade. Depending on the nature of the assessment task, lecturers may also contextualize and/or amend these specific criteria. The recommended grade is tentative only, subject to standardisation processes and approval by the School of Education Learning and Teaching Committee.

8. RESOURCES

Suggested Readings

- Ng, Wan (2012) Can we teach digital natives digital literacy?
- Ryan, Josephine , Scott, Anne and Walsh, Maureen(2010) 'Pedagogy in the multimodal classroom: an analysis of the challenges and opportunities for teachers', *Teachers and Teaching*, 16: 4, 477 — 489
- The 2015 K-12 Edition Expert Panel, New Media Consortium (2015) NMC Horizon Report: 2015 K-12 Edition

Suggested viewing

- https://www.ted.com/talks/ken_robinson_changing_education_paradigms
- <https://www.commonsemmedia.org/videos/introduction-to-the-samr-model>

Further papers and websites will be posted on Moodle