







UNIVERSITY OF BRITISH COLUMBIA

Master of Educational Technology (MET)

ETEC 511: Foundations of Educational Technology Version 3.0 (Sect. 64a, 64b, 64c, 64d)

Course Designer: Stephen Petrina, Matiul Alam & Franc Feng (Version 3.0) Course Instructors: Drs. Matiul Alam, Franc Feng & Stephen Petrina Email: <u>malam@interchange.ubc.ca</u>, <u>feng@mail.ubc.ca</u>, <u>stephen.petrina@ubc.ca</u> Course Graduate Assistant: Yu-Ling Lee WWW: http://www.met.ubc.ca + http://www.blogs.ubc.ca/etec

Course Description:

This course provides both a disciplinary tour and poststructuralist deconstruction of the foundations of e-learning, educational technology, learning technologies, and new media. It addresses the anthropological, economic, historical, phenomenological, philosophical, political, psychological, sociological, and spiritual foundations of educational technology along with a critique of these foundations. These foundations are cast within a larger framework of ecological-natural, ethicalpersonal, existential-spiritual, socio-political and technical-empirical dimensions of technology with implications for curriculum and instructional design. How, why and to what degree have media and technology been incorporated into, or changed by, education and what foundational structures underlie these processes? How do the processes of foundation building shape educational media, technology or learning technologies? What happens to e-learning, educational technology, learning technologies, and new media if and when we can no longer rely on their foundations or when foundations shift? This course is designed from a basis that educational media and learning technologies are not merely tools; educational premises are *neither* fully durable nor pliable; and actors or agents of education are not merely humans. It begins with an exploration of the cultural and social foundations of education, and proceeds through disciplinary and interdisciplinary foundations of e-learning, educational technology, learning technologies, and new media and concludes with a critique of these foundations and the cultural studies of educational technology, learning technologies, and new media.

Texts (Required): ETEC 511 Readings @ UBC Blackboard Learning Shell

Valued Ends of the Course:

Our intention is to help you develop a framework for exploring and understanding the foundations of e-learning, educational technology, learning technologies, and new media as unsettled and lived by students and teachers. We will encourage you to examine your own biases toward the foundations of media and technology, and a major effort will be in providing you with a background for research into the foundations of e-learning, educational technology, learning technologies, and new media. We will also emphasize e-Learning and ET with SOUL.

Assessment (for details, see below):

- 1. Participation in Online Activities (20%)
- 2. Discourse Leadership @ Case Study (40%)
- 3. Scholarly Essay or Essay Review (40%)

Deadline: Ongoing 10 Nov 30 Nov

- Academic Honesty and Standards, and Academic Freedom: UBC Calendar
- Policies and Regulations (Selected): <u>http://www.students.ubc.ca/calendar</u>
- Academic Accommodation for Students with Disabilities: Students with a disability who wish to have an academic accommodation should contact the Access & Diversity without delay (see UBC Policy #73 www.universitycounsel.ubc.ca/ policies/policy73.pdf).

	Grading Guidelines
	Approved July 2008
A leve	el - Good to Excellent Work
A+	(90-100%) A very high level of quality throughout every aspect of the work. It shows the individual (or group) has gone well beyond what has been provided and has extended the usual ways of thinking and/or performing. Outstanding comprehension of subject matter and use of existing literature and research. Consistently integrates critical and creative perspectives in relation to the subject material. The work shows a very high degree of engagement with the topic.
А	(85-89%) Generally a high quality throughout the work. No problems of any significance, and evidence of attention given to each and every detail. Very good comprehension of subject and use of existing literature and research. For the most part, integrates critical and creative perspectives in relation to the subject material. Shows a high degree of engagement with the topic.
A-	(80-84%) Generally a good quality throughout the work. A few problems of minor significance. Good comprehension of subject matter and use of existing literature and research. Work demonstrates an ability to integrate critical and creative perspectives on most occasions. The work demonstrates a reasonable degree of engagement with the topic.
B leve	el - Adequate Work
B+	(76-79%) Some aspects of good quality to the work. Some problems of minor significance. There are examples of integrating critical and creative perspectives in relation to the subject material. A degree of engagement with the topic.
В	(72-75%) Adequate quality. A number of problems of some significance. Difficulty evident in the comprehension of the subject material and use of existing literature and research. Only a few examples of integrating critical and creative perspectives in relation to the subject material. Some engagement with the topic.
B-	(68-71%) Barely adequate work at the graduate level.
	E: For UBC's Faculty of Graduate Studies (FOGS), a final mark below 68% for Doctoral students and below 60% asters students is the equivalent of a Failing mark.
C & I) level - Seriously Flawed Work
C	(55-67%) Serious flaws in understanding of the subject <i>material</i> . Minimal integration of critical and creative perspectives in relation to the subject material. Inadequate engagement with the topic. Inadequate work at the graduate level.
<u>D leve</u>	
D	(50-54%)

Flevel - Failing Work

F (0-49%)

ETEC 511 Course Schedule & Readings: Each module generally consists of activities, readings, chat and discussion. Readings for each module include a balance of activities, often supplemented by image and sound resources.

Date	Module	Assignments	Live Forum	Themes & Topics		
Week 1 3-8 Sept	#1	Course Intro		Course introduction, Online connections, Mapping & Definitions		
Technical-Empirical Dimension of Educational Technology						
Week 2 9-15 Sept	#2			Instructional Design of Educational Technology		
Week 3 16-22 Sept	#3			History & Philosophy of Educational Technology		
Ethical-Personal & Socio-Political Dimension of Educational Technology						
Week 4 23-29 Sept	#4			Ethics & Jurisprudence of Educational Technology		
Week 5 30 Sept-6 Oct	#5			Politics & Sociology of Educational Technology		
Week 6 7-13 Oct	#5			Politics & Sociology of Educational Technology		
		<u> </u>	October Reading Bre			
Ecological-Natural Dimension of Educational Technology						
Week 8 21-27 Oct	#6	Essay Proposal Due		Psychology & Phenomenology of Educational Technology		
Week 9 28 Oct -3 Nov	#7			Ecology & Nature of Educational Technology		
	Exist	ential-Spiritual Dim	ension of Educational	Technology		
Week 10 4-10 Nov	#8	Case Study of ET due		Spirituality of Educational Technology		
Week 11 11-17 Nov	#8			Spirituality of Educational Technology		
		(Week 12) Scholar	rly Essays & Essay Rev	iews		
Week 12 18-25 Nov	-	Scholarly Essay Due: 30 Nov		Course Feedback		

Technical-Empirical Dimension of Educational Technology

Module 1

Introduction / The Definition of Educational Technology

Readings / Media:

- 1. Luppicini, R. (2005). A systems definition of educational technology in society. *Educational Technology & Society*, 8 (3), 103-109.
- Hlynka, D. & Jacobsen, M. (2009). What is educational technology, anyway? A commentary on the new AECT definition of the field. *Canadian Journal of Learning and Technology*, 35(2), <u>http://cjlt.csj.ualberta.ca/index.php/cjlt/article/view/527/260</u>.

Module 2 The Instructional Design of Educational Technology

Readings / Media

- 1. Clemens, D. (2011). The dangerous Mr. Khan. *NAS Article*, http://www.nas.org/articles/The Dangerous Mr Khan.
- 3. Scanlon, I. (2002). Educational technology: The influence of theory. *Journal of Interactive Media in Education*, 6, 1-19. Library Portal Access.
- Kolodner, J. L. (1992). An introduction to case-based reasoning. *Artificial Intelligence*, 6, 3-34. Library Portal Access.
- 3. C. C. Lundberg. (1993). A framework for student case preparation. *Case Research Journal*, *2*, 132-144. Library Portal Access.

Module 3 The History and Philosophy of Educational Technology

Readings / Media

- 1. Knowlton, E. (1992). The hand and the hammer: A brief critique of the overhead projector. *Feminist Teacher*, 6(2), 21-23, 41. Library Portal Access.
- 2. Adams, C. (2008). The poetics of PowerPoint. *Explorations in Media Ecology*, 7(4), 283–289. Library Portal Access.
- 3. Tufte, E. R. (2003, September). PowerPoint is evil. Wired, 11(9).
- Heidegger, M. (1953/1977). The question concerning technology. In M. Heidegger, *The question concerning technology and other essays* (trans. W. Lovitt) (pp. 3-35). New York: Harper & Row. <u>http://simondon.ocular-witness.com/wp-content/uploads/2008/05/question concerning technology.pdf</u>

Ethical-Personal & Socio-Political Dimensions of Educational Technology

Module 4 The Ethics & Jurisprudence of Educational Technology

Readings / Media

- 1. Philip, K. (2005). What is a technological author? The pirate function and intellectual property. *Postcolonial Studies*, 8(2), 199-218. Library Portal Access.
- 2. Lerner, J. & Triole, J. (2005). The economics of technology sharing: Open source and beyond. *Journal of Economic Perspectives*, 19(2), 99-120. Library Portal Access.
- Rivard, R. (2013, April 25). The world is not flat. *Inside Higher Ed*, <u>http://www.insidehighered.com/news/2013/04/25/moocs-may-eye-world-market-does-world-want-them</u>.

Module 5 The Politics & Sociology of Educational Technology

Readings / Media

- 1. Bourdieu, P. (1980). The aristocracy of culture (trans. R. Nice). *Media, Culture & Society, 2*, 225-254. Library Portal Access.
- 2. Haraway, D. (1985). A manifesto for cyborgs. Socialist Review, 15(2), 65-107.
- Buechley, L., Eisenberg, M., Catchen, J., & Crockett, A. (2008). The LilyPad Arduino: Using computational textiles to investigate engagement, aesthetics, and diversity in computer science education. *Proceedings of the twenty-sixth annual SIGCHI conference on Human factors in computing systems* (pp. 423-432), Florence, Italy, 5-10 April. Library Portal Access (ACM Digital Archive database)

Ecological-Natural Dimension of Educational Technology

Module 6 The Psychology & Phenomenology of Educational Technology

Readings / Media

- 1. Turkle, S. (2004). Whither psychoanalysis in computer culture. *Psychoanalytic Psychology*, 21(1), 16-30. Library Portal Access.
- 2. Turkle, S. (2012, April 21). The flight from conversation. *New York Times*, <u>http://www.nytimes.com/2012/04/22/opinion/sunday/the-flight-from-</u> conversation.html?pagewanted=all& r=0.
- 3. Dall'Alba, G. & Barnacle, R. (2005). Embodied knowing in online environments. *Educational Philosophy and Theory*, *37*(5), 719-744. Library Portal Access.

Module 7

The Ecology & Nature of Educational Technology

Readings / Media

- Pitman, S. (2008). The impact of media technologies on child development and wellbeing. OZChild, <u>http://www.ozchild.org.au/userfiles/docs/ozchild/research-papers/ImpactOfElectronicMedia.pdf</u>
- Zhao, Y. & Frank, K. (2003). Factors affecting technology uses in schools: An ecological perspective. *American Educational Research Journal*, 40(4), 807-840. Library Portal Access.

Existential-Spiritual Dimension of Educational Technology

Module 8 The Spirituality of Educational Technology

Readings / Media

- 1. Davis, E. (1993). Techgnosis: Magic, memory, and the angels of information. *South Atlantic Quarterly*, 92(4), 585-616. Library Portal Access.
- 2. Feng, F. & Petrina, S. (2010). The flesh is willing but the spirit is weak. Unpublished manuscript. Introduction to *Technology, Religion, Spirituality and the Sacred*. See module 8.

Participation & Assignments

Participation:

Participation is valued at 20% of your final grade. We refer to the scholarly level of participation as **academic conversation**, which entails a variety of things including academic conversation, articulation and presentation. Participation is interdependent with **preparation** for each module, which involves *reading* (highlighting, pagination post-its, margin notes, comments & questions, etc.), *writing* (posting to discussions, note-taking, outlining, questioning, defining, mapping, framing, summarizing, journaling, blogging, podcasting, exposition, etc.), *organizing* (documenting, labeling, ordering, archiving, filing, sequencing events, chronicling, etc.), *reflecting* (rethinking, reincorporating, remapping, analyzing, synthesizing, etc.), and *speaking* (podcasting, corresponding with peers, chat, etc.). One goal of preparation is to sustain increasingly sophisticated academic conversations or engagement with the readings, course and peers. A second goal is to develop systematic approaches for engaging with the readings and your peers (i.e., developing reading, speaking, writing, organizing, and reflection form(at)s and styles that are effective). **Read for Meaning along with Purpose...**



Assignments

- 1. **Discourse Leadership** @ Case Study (40%)— Choose one week and topic on the schedule and in coordination with the module develop a case study for K-12 students. Format: Group Project— groups of 4. For the case that you develop:
 - 1. Review and adhere to the guidelines for case studies in Module 2.
 - 2. Develop a case that reflects the theme for the week/module chosen.
 - 3. The case study must be designed for specific grade levels (e. g., 4-5, 6-8, 10-12).
 - 4. Design necessary downloads @ handouts, discussion questions and presentation media for clarifying the case study, e.g.:
 - Image, Text, Sound files
 - Timeline
 - Wiki / Interactive Web / Prezi
 - Voice & Podcast, etc.
 - 5. To bring closure to the topic/module for the week, present your case study in either synchronous or asynchronous time.
 - 6. Please note that the workload for this ought to be equitable across all group members. Consider a division of labour to complete the assignment.
 - 7. Submit link to Case Study via the Assignments tool.



2. Scholarly Essay (40%)— Choose a topic that corresponds with one of the weekly topics (i.e., foundations) or themes and write a scholarly paper exploring media and technology in education (i.e., apps, artifacts, devices, problems, processes, trends, etc.). The essay should provide a clear, cogent, concise exploration or case study of the topic (e.g., topics within or about e-learning, educational technology, learning technologies, ICT, new media, instructional design, curriculum design, etc.). Take a position (state a thesis or argument) and provide evidence, through examples and narrative, to support the position. Be creative and choose a topic that really interests you!

At the 2/3-point of the course, please also submit a *one page outline* of your paper as a work in progress. Outline = outline form. This includes the:

- 1. Topic
- 2. Theme and argument
 - a. The argument or thesis
 - b. The background
- 3. Primary and Secondary sources for insight into the topic
 - a. Issues to be addressed
 - b. Literature to be consulted
- 4. Provisional conclusions drawn from the argument & issues or data
- 5. Structure / sections of the paper, etc.

Assessment: (Limit to 10-12, tight well-written double-spaced pages including title page (limit to 3000 words + references) (upload essay via *Assignments* tool and link to e-Portfolio).

- 1. Clarity of communication / writing
 - a. Is the writing clear and concise?
 - b. Are the ideas focused and organized?
- 2. Development of argument / thesis
 - a. Is the argument coherent? Thoughtful? Analytical? Critical? Sophisticated?
- 3. Exploration of content and theory
 - a. Is there evidence of critically and theoretically exploring the issues?
 - b. Are the ideas theorized, synthesized, extended or applied?
- 4. Examples
 - a. Are examples sufficient? Do examples ground the paper?
 - b. Are there narrative examples?
- 5. Grammar & Style
 - a. Organization, sentence structure, paragraphs, spelling
 - b. APA Style (format, references)

Scholarly Essay					
LowHigh					
Clarity of communication/writing 110					
Development of argument / thesis 15					
Exploration of content and theory 110					
Provision of effective and sufficient examples 110					
Grammar & Style 15					
Total: xx / 40					

or Essay Review (40%)— Choose a topic that corresponds with one of the weekly topics (i.e., Jurisprudence of ET) or themes and write an essay review exploring the foundations of ET. Drawing on 7 - 10 carefully selected and relevant research articles or a smaller number of books (2 - 3), write a critical essay review on a topic within or about ET, ID, e-Learning, new media, etc. Establish the purpose for your review and the approach you will use in the introduction. Provide enough of a summary of each source (article, book, etc.) so that the readings are understandable to a general reader of your essay. The purpose of your review should establish the basis of your analysis / synthesis. You may choose to critique the articles and texts based on some of the assigned course readings. Strive for clarity and conciseness in your writing by trying to keep your audience in mind.

At the 2/3-point of the course (following the break), please also submit a *one page outline* of your paper as a work in progress. Outline = outline form (see details above).

Assessment: (Limit to 10-12, tight well-written double-spaced pages including title page (limit to 3000 words + references) (upload essay via *Assignments* tool and link to e-Portfolio).

- 1. Overview / Introduction of subject, theories and issues involved
 - Type of essay review (theory, methodology, policy, quantitative research, qualitative research, etc.)
 - Scope: what type of resources are best?
 - Search for information: wide enough and narrow enough
- 2. Categories selected as natural divides of thesis and reviewed sources
 - Sources organized around the research question or thesis
 - Areas of controversy or debate included
- 3. Analysis and interpretation of overarching similarities and variances of ideas: Include
 - Provenance: credentials, evidence
 - Objectivity: authors' point of view and representation of other views
 - Persuasiveness: which theses are most convincing v least?
 - Value: Does this work contribute in a significant way to understanding the subject?
- 4. Summation or conclusions of thesis generating idea in context with materials reviewed
 - What is known and not known
 - Areas of further research

- Relevant, appropriate and, useful
- 5. Grammar & Style
 - Organization, sentence structure, paragraphs, spelling
 - APA Style (format, references)

Total: xx / 40

Journals in Technology and Education

- 1. American Journal of Distance Education, The
- 2. <u>Asynchronous Learning Networks Magazine</u> (electronic) (see also Journal of ALN)
- 3. Australian Journal of Educational Technology
- 4. British Journal of Educational Technology
- 5. Canadian Journal of Learning Technology
- 6. Canadian of Science, Math and Technology Education
- 7. <u>College & University Media Review: A Look at</u> <u>Practices, Trends, & Research</u>
- 8. <u>Computers & Education</u>
- 9. Computers and Composition
- 10. Computers in Human Behavior
- 11. <u>Computers in Libraries</u>
- 12. <u>Contemporary Issues in Technology & Teacher</u> <u>Education</u> (electronic)
- 13. Currents in Electronic Literacy
- 14. Education and Information Technologies
- 15. Educational Media International
- 16. Educational Technology Magazine
- 17. <u>Educational Technology Research and</u> <u>Development</u>
- 18. Educational Technology Review
- 19. Educational Technology Review (electronic)
- 20. EDUCAUSE Quarterly
- 21. EDUCAUSE Review
- 22. <u>Electronic Journal for the Integration of</u> <u>Technology in Education</u>
- 23. <u>Human-Computer Interaction: A Journal of</u> <u>Theoretical, Empirical, & Methodological Issues of</u> <u>User Science and of System Design</u>
- 24. Information Society, The: An International Journal
- 25. <u>Information Technology in Childhood Education</u> <u>Annual</u>
- 26. Information Technology and Disability
- 27. Information Technology, Education and Society
- 28. Innovations in Education & Teaching International
- 29. Instructional Science
- 30. <u>Interactive Multimedia Electronic Journal of</u> <u>Computer-Enhanced Learning</u> (electronic)
- 31. International Journal of AI in Education
- *32. International Journal of Technology and Design Education*
- 33. International Journal of Educational Technology
- 34. International Journal of Instructional Media
- 35. International Journal on E-Learning
- 36. <u>International Review of Research in Open and</u> <u>Distance Education</u>
- 37. Internet and Higher Education, The
- 38. Internet TESL Journal, The(electronic)
- 39. Journal of Asynchronous Learning Networks (electronic) (see also ALN Magazine)
- 40. Journal of Computer Assisted Learning

- 41. Journal of Computer Based Instruction
- 42. <u>Interpersonal Computing and Technology</u> <u>Journal</u> (electronic)
- 43. <u>IT Journal Online</u>
- 44. Journal of Computing in Higher Education
- 45. Journal of Computing Research
- 46. Journal of Distance Education
- 47. Journal of Educational Computing Research
- 48. Journal of Educational Media
- *49. Journal of Educational Multimedia and* <u>Hypermedia</u>
- 50. Journal of Educational Technology Systems
- 51. Journal of IT Education
- 52. Journal of Information Technology for Teacher Education
- 53. Journal of Interactive Learning Research
- 54. Journal of Interactive Media in Education (electronic)
- 55. Interactive Multimedia Electronic Journal of Computer-Enhanced Learning
- 56. JOE: The Journal of Online Education
- 57. Journal of Research on Computing in Education
- 58. Journal of Science and Educational Technology
- 59. Journal of Special Education Technology
- 60. Journal of Technology and Teacher Education
- 61. Journal of Technology Education
- 62. Journal of Technology Studies
- 63. Learning & Leading with Technology
- 64. Learning Environments Research
- 65. Learning With Technology
- 66. <u>Learning Technology</u>
- 67. Mathematics and Computer Education
- 68. Media and Methods
- 69. <u>Meridian: A Middle School Computer</u> <u>Technologies Journal</u>
- 70. <u>MultiMedia Schools</u>
- 71. New Review of Hypermedia and Multimedia
- 72. <u>Online Chronicle of Distance Education &</u> <u>Communication</u>
- 73. <u>Open Learning: The Journal of Open & Distance</u> <u>Learning</u>
- 74. Quarterly Review of Distance Education, The
- 75. <u>Syllabus</u>
- 76. <u>T.H.E. Journal</u>
- 77. <u>Teaching English with Technology: A Journal for</u> <u>Teachers of English</u> (electronic)
- 78. Technology and Children
- 79. Technology & Learning
- 80. Technology, Pedagogy and Education
- 81. Technos
- 82. <u>TechTrends</u>
- 83. THEN: Technology, Humanities, Education & Narrative
- 84. <u>WebNet Journal</u>