

UNIVERSITY OF BRITISH COLUMBIA

Master of Educational Technology (MET)

ETEC 511: Foundations of Educational Technology

Version 3.0 (Sect. 64a, 64b, 64c, 64d, 64e)

Course Instructors: Drs. Matiul Alam, Franc Feng, Yifei Wang (Coordinator Stephen Petrina)

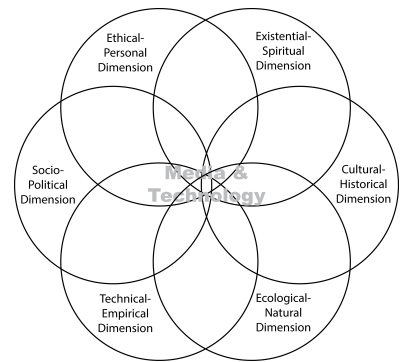
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Course Graduate Assistant: TBA

WWW: <http://www.met.ubc.ca> + <http://www.blogs.ubc.ca/etec> + <http://elearning.ubc.ca>

Course Description:

This case-based course addresses the cultural-historical, ecological-natural, ethical-personal, 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 foundations underlie these processes? The 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 instructional design and case-based reasoning, proceeds through disciplinary and interdisciplinary foundations of e-learning, educational technology, learning technologies, and new media and concludes with the relatively neglected existential-spiritual dimension.



Texts (Required):

ETEC 511 Readings @ UBC Blackboard Learning Shell

Valued Ends of the Course:

Our intention is to 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 (slow online ubiquitous learning).

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
17 Nov
1 Dec

- **Academic Honesty and Standards, and Academic Freedom:** *UBC Calendar*
- **Policies and Regulations (Selected):** <http://www.students.ubc.ca/calendar>
- **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 level - 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.
- A (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 level - 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.
- B (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.

NOTE: For UBC's Faculty of Graduate Studies (FOGS), a final mark below 68% for Doctoral students and below 60% for Masters students is the equivalent of a Failing mark.

C & D level - Seriously Flawed Work

- C (55-67%) Serious flaws in understanding of the subject *material*. Minimal integration of critical and creative perspectives in relation to the subject material. Inadequate engagement with the topic. Inadequate work at the graduate level.

D level

- D (50-54%)

F level - Failing Work

- F (0-49%)

ETEC 511 Course Schedule & Readings:

Each module generally consists of activities, readings and discussion. Readings for each module include a balance of activities, often supplemented by image and sound resources.

Date	Module	Assignments	Forum	Themes & Topics
Technical-Empirical Dimension of Educational Technology				
Week 1 8-13 Sept	#1	Course Intro	Online Discussion	Course introduction, Online connections, Mapping & Definition
Week 2 14-20 Sept	#1-#2		Online Discussion	Module 1, cont'd + Mishra & Koehler
Week 3 21-27 Sept	#2		Online Discussion	Instructional Design of Educational Technology
Cultural-Historical Dimension of Educational Technology				
Week 4 28 Sept -4 Oct	#3		Online Discussion	History & Philosophy of Educational Technology
Ethical-Personal & Socio-Political Dimension of Educational Technology				
Week 5 5-11 Oct	#3-#4		Online Discussion	Ethics & Jurisprudence of Educational Technology
Week 6 12-18 Oct	#4-#5		Online Discussion	Politics & Sociology of Educational Technology
(Week 7) 19 - 25 October Reading Break				
Ecological-Natural Dimension of Educational Technology				
Week 8 26 Oct -2 Nov	#5-#6	Essay Proposal Due	Online Discussion	Psychology & Phenomenology of Educational Technology
Week 9 3-9 Nov	#6		Online Discussion	Psychology & Phenomenology of Educational Technology
Week 10 10-16 Nov	#7		Online Discussion	Ecology & Nature of Educational Technology
Existential-Spiritual Dimension of Educational Technology				
Week 11 17-23 Nov	#8	Case Study of ET due	Online Discussion	Spirituality of Educational Technology
(Week 12) Scholarly Essays & Essay Reviews				
Week 12 25-30 Nov	#8	Scholarly Essay Due: 1 Dec	Online Discussion	Spirituality of Educational Technology Course Feedback

Technical-Empirical Dimension of Educational Technology

Module 1

Introduction / The Definition of Educational Technology

Readings / Media:

1. Definition of Form:
 - a. Lapowsky, I. (2015, May 4). [Inside the school Silicon Valley thinks will save education](#). *Wired*.
 - b. Godsey, M. (2015, March 25). [The deconstruction of the K-12 teacher](#). *The Atlantic*.
 - c. Banksy. (2015). [Dismaland Bemusement Park](#) [Art and technology infrastructure]. Weston-super-Mare, UK.
 - d. Mitra, S. (2010, July). [The child-driven education](#) [TED talk].
2. Definition of Terms:
 - a. Ely, D. P. & Plomp, T. (Eds.). (1996). *Classic writings on instructional technology* (Volume 1) (pp. ix-14). Englewood, CO: Libraries Unlimited, Inc.
 - b. 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).
 - c. Ross, S. M., Morrison, G. S. & Loather, D. L. (2010). Educational technology research past and present: Balancing rigor and relevance to impact school learning. *Contemporary Educational Technology*, 1(1), 17-35.
3. Reference (not required):
 - a. Ouimette, J., W. Surry, D. W., Grubb, A. & Hall, D. A. (2009). Essential books in the field of instructional design and technology. *Australasian Journal of Educational Technology*, 25(5), 731-747.
 - b. Dalgarno, B., Kennedy, G & Bennett, S. (2015). Editorial [Top journals in ET]. *Australasian Journal of Education Technology*, 30(3), 1-4.

Module 2

The Instructional Design of Educational Technology

Readings / Media

1. Mishra, P. & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for integrating technology in teacher knowledge. *Teachers College Record*, 108(6), 1017-1054.
2. Case-Based Learning:
 - a. Kolodner, J. L. (1992). An introduction to case-based reasoning. *Artificial Intelligence*, 6, 3-34.
 - b. Johnson, J. F., Bagdasarov, Z., Connelly, S., Harkrider, L. Devenport, L. D. Mumford, M. D. & Thiel, C. E. (2013). Case-based ethics education: The impact of cause complexity and outcome favorability on ethicality. *Journal of Empirical Research on Human Research Ethics*, 7(3), 63-77.
3. Preparing Case Studies:
 - a. C. C. Lundberg. (1993). A framework for student case preparation. *Case Research Journal*, 2, 132-144.
 - b. Wassermann, S. (1994). Using cases to study teaching. *Phi Delta Kappan*, 75(8), 602-604, 606-608, 610-611.
 - c. Rizzo, A.-M. (1998). Inventing narratives in ethical reasoning in an administrative ethics course. *Journal of Public Affairs Education*, 4(1), 1-10.

Cultural-Historical Dimension of Educational Technology

Module 3

The History and Philosophy of Educational Technology

Readings / Media

1. Adams, C. (2008). The poetics of PowerPoint. *Explorations in Media Ecology*, 7(4), 283-289.

2. Tufte, E. R. (2003, September). PowerPoint is evil. *Wired*, 11(9).
3. Friesen, N. (2011). The lecture as a transmedial pedagogical form: A historical analysis. *Educational Researcher*, 40(3), 95-102.
4. 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.
http://simondon.ocular-witness.com/wp-content/uploads/2008/05/question_concerning_technology.pdf

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.
2. Lerner, J. & Triole, J. (2005). The economics of technology sharing: Open source and beyond. *Journal of Economic Perspectives*, 19(2), 99-120.
3. Rivard, R. (2013, April 25). The world is not flat. *Inside Higher Ed*,
<http://www.insidehighered.com/news/2013/04/25/moocs-may-eye-world-market-does-world-want-them>.

Module 5

The Politics & Sociology of Educational Technology

Readings / Media

1. Bourdieu, P. (1996). *On television* (trans. P. P. Ferguson) (pp. 10-38). New York: The New Press.
2. Haraway, D. (1985). A manifesto for cyborgs. *Socialist Review*, 15(2), 65-107.
3. 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.
4. Alam, M. (2013). Open and flexible distance learning: Inclusive approaches. [videorecording]. View from 16:39.

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.
2. Turkle, S. (2012, April 21). The flight from conversation. *New York Times*,
http://www.nytimes.com/2012/04/22/opinion/sunday/the-flight-from-conversation.html?pagewanted=all&_r=0.
3. Adams, C. (2012). Technology as teacher: Digital media and the re-schooling of everyday life. *Existential Analysis* 23(2), 262-273.

Module 7

The Ecology & Nature of Educational Technology

Readings / Media

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

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.
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*.
3. Petrina, S. (2015). Critique of technology [Introduction + first section]. In P. J. Williams & K. Stables (Eds.), *Critique in design and technology education* (pp. 1-6). Dordrecht, The Netherlands: Springer.

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, tweeting, 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...**

Participation

	Low	Avg	High
Appropriately and accurately articulates key constructs and themes in readings, etc.	1	3	5
Reveals an attempt to synthesize knowledge of media and technology in education (readings, etc.).	1	5.5	10
Advances collective knowledge and consciousness by engaging with authors, peers, instructors in the online course	1	3	5
Total:	xx / 20		

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.

Discourse Leadership @ Case Study

Low-----Avg-----High
Addresses theme for module 1-----5.5-----10
Provides comprehensive case for case-based learning 1-----10.5-----20
Communication and media are professional in format— Style is clean and coherent 1-----5.5-----10
Total: xx / 40

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

	Low-----	Avg-----	High
Clarity of communication/writing	1-----	5.5-----	10
Development of argument / thesis	1-----	3-----	5
Exploration of content and theory	1-----	5.5-----	10
Provision of effective and sufficient examples	1-----	5.5-----	10
Grammar & Style	1-----	3-----	5
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).

Essay Review

	Low-----	Avg-----	High
Overview / Introduction of subject, theories and issues involved	1-----	5.5-----	10
Categories selected as natural divides of thesis and reviewed material	1-----	3-----	5
Analysis and interpretation of overarching similarities and variances of ideas	1-----	5.5-----	10
Summation or conclusions of thesis generating idea in context with materials reviewed	1-----	5.5-----	10
Grammar & Style	1-----	3-----	5
Total:	xx / 40		

Due	Section	Pages
	1. Overview / Introduction of subject, theories and issues involved <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • What is known and not known • Areas of further research • Relevant, appropriate and, useful 	
	5. Grammar & Style <ul style="list-style-type: none"> • Organization, sentence structure, paragraphs, spelling • APA Style (format, references) 	

Journals in Technology and Education

1. [*American Journal of Distance Education, The*](#)
2. [*Asynchronous Learning Networks Magazine*](#) (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. [*College & University Media Review: A Look at Practices, Trends, & Research*](#)
8. [*Computers & Education*](#)
9. [*Computers and Composition*](#)
10. [*Computers in Human Behavior*](#)
11. [*Computers in Libraries*](#)
12. [*Contemporary Issues in Technology & Teacher Education*](#) (electronic)
13. [*Currents in Electronic Literacy*](#)
14. [*Education and Information Technologies*](#)
15. [*Educational Media International*](#)
16. [*Educational Technology Magazine*](#)
17. [*Educational Technology Research and Development*](#)
18. [*Educational Technology Review*](#)
19. [*Educational Technology Review*](#) (electronic)
20. [*EDUCAUSE Quarterly*](#)
21. [*EDUCAUSE Review*](#)
22. [*Electronic Journal for the Integration of Technology in Education*](#)
23. [*Human-Computer Interaction: A Journal of Theoretical, Empirical, & Methodological Issues of User Science and of System Design*](#)
24. [*Information Society, The: An International Journal*](#)
25. [*Information Technology in Childhood Education Annual*](#)
26. [*Information Technology and Disability*](#)
27. [*Information Technology, Education and Society*](#)
28. [*Innovations in Education & Teaching International*](#)
29. [*Instructional Science*](#)
30. [*Interactive Multimedia Electronic Journal of Computer-Enhanced Learning*](#) (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. [*International Review of Research in Open and Distance Education*](#)
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. [*Interpersonal Computing and Technology Journal*](#) (electronic)
43. [*IT Journal Online*](#)
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 Hypermedia*](#)
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. [*Learning Technology*](#)
67. [*Mathematics and Computer Education*](#)
68. [*Media and Methods*](#)
69. [*Meridian: A Middle School Computer Technologies Journal*](#)
70. [*MultiMedia Schools*](#)
71. [*New Review of Hypermedia and Multimedia*](#)
72. [*Online Chronicle of Distance Education & Communication*](#)
73. [*Open Learning: The Journal of Open & Distance Learning*](#)
74. [*Quarterly Review of Distance Education, The*](#)
75. [*Syllabus*](#)
76. [*T.H.E. Journal*](#)
77. [*Teaching English with Technology: A Journal for Teachers of English*](#) (electronic)
78. [*Technology and Children*](#)
79. [*Technology & Learning*](#)
80. [*Technology, Pedagogy and Education*](#)
81. [*Technos*](#)
82. [*TechTrends*](#)
83. [*THEN: Technology, Humanities, Education & Narrative*](#)
84. [*WebNet Journal*](#)