



Faculty of Education

AEDT 1120: Foundations of Digital Teaching and Learning Technologies  
Course outline for Fall 2016

**1. Course Details & Important Dates\***

Term	Course Type	Day	Time
F	AEDT	Monday	Tutorial: 12:10pm – 1:00pm (44228) 6:10pm – 7:00pm (44229) 9:10pm-10:00pm (44230)

Location	CRN #	Classes Start	Classes End	Final Exam Period
Online	43053/43054/43055	September 12, 2016	December 5, 2016	N/A

\*For other important dates go to: [www.uoit.ca](http://www.uoit.ca) >Current Students >Important Dates and Deadlines

**2. Instructor Contact Information**

Instructor Name	Office	Skype	Email
Janet Symmons	Virtual	XXXX	XXXX
Office Hours: By appointment. As this is an online course, I will be virtually available for discussion through Blackboard, Skype, IM or other means.			

**3. Course Description**

The purpose of this course is to introduce the technologies that underlie digital teaching and learning. Students will examine the history of computing, the technological underpinnings of digital technologies (e.g., binary numbers, ASCII codes), programming concepts, early uses of computing in support of learning, and computer-assisted instruction. Potential topics include, but are not limited to, the impact of major technological developments on digital learning technologies (e.g., transistors and miniaturization, CRT displays, pointing devices, external memory devices, and high speed communications).

**Pre-Requisite:** None **Credits:** 3.0 **Hours:** 36hr

**4. Learning Outcomes**

On the successful completion of the course, students will be able to:

1. Identify the major developments in the history of computing, including both hardware developments and social changes.
2. Describe the ways in which early computing served learning and teaching needs.
3. Describe the technical bases for modern computing.
4. Analyze and explain the ways in which technological changes have created new affordances for teaching and learning.
5. Identify and employ teaching methodologies and create learning opportunities as appropriate for adult education settings and contexts.

## 5. Course Design

All course activities will be designed in a manner that will allow for access with a wide range of mobile devices such as Smartphones and tablets (iPads, Galaxy Tab, etc.), therefore favouring the development of a truly mobile learning culture, anywhere, anytime.

This 36 hour (3 credit) course will be articulated in **12 MANDATORY modules** each including:

1. **1 hour of video clip-based 'lecture'** broken down into three or four 12-15 minute long segments. Content experts (i.e., a professor from our own Faculty or a recognized expert from another institution) write the video clips. These will subsequently be produced and publically published on YouTube.com.
2. **1 hour of synchronous group tutorial activities in Adobe Connect.** The video conferencing sessions in Connect will be planned in detail by the professor (content expert) in collaboration with the Teaching and Learning Office. By scheduling the different groups at different times of the day and of the week, the program will be able to accommodate students from a wide variety of time zones.
3. **1 hour devoted to online activities** such as forum discussions, self-directed learning activities, etc., as specified in the course calendar below, using a wide variety of online resources as chosen primarily by the students.

Although this covers the basic three-hour commitment to the class sessions, please note that **additional reading** or other course work will be expected from the student. While the **Blackboard course site** will be the sole official web site for this course, other environments will be explored, used, and analyzed. The links for each of these will be posted on the Blackboard site as we progress.

Please Note: The Blackboard course web site is an indispensable portion of the course. Students should consult it regularly and use the links there as part of their research tool collection. All course requirements, handouts, marking rubrics, assessment, and related materials are posted to the course web site.

## 6. Outline of Topics in the Course

A complete list of assigned weekly readings and assignments can be found below in the course schedule. Readings will be posted to the Blackboard site at least 24-48 hours in advance of each tutorial session. This enables the class to be responsive to interests and topics as they emerge rather than being slavishly guided by the instructor's preconceptions. Learners are encouraged to read well beyond the required

material and a portion of the class is devoted to discussions of additional readings that candidates or the instructor may wish to recommend to the class.

The following table outlines the overall approach to PBL taken in this course. In our first two weeks we will orient ourselves to the course, its expectations and flow. In Week 1 we will also work on an individual PBL activity that will conclude in Week 2. Beginning in Week 3 we will start into a second PBL activity. This will conclude in Week 5 with a series of group presentations. Beginning in Week 6 we will start another PBL activity that will conclude with individual presentations in Weeks 11 and 12. Our final 2 weeks will be opportunity to synthesize and debrief our experiences.

Week	1	2	3	4	5	6	7	8	9	10	11	12	
<b>Problem</b>	Introduction/Scenario A		Scenario B			Scenario C						Wrap Up	Wrap Up
<b>Workflow</b>	Initial orientation to course; flow and approach		Identify problem, resources and requisite knowledge	Collaborative Learning	Synthesis	Identify problem, resources and requisite knowledge	Collaborative Learning	Collaborative Learning	Collaborative Learning	Collaborative Learning	Synthesis of course	Synthesis of course	
<b>Resources Available (see detailed weekly outline below)</b>	Videos Readings Tutorials  Start Scenario A PBL	Videos Readings Tutorials  Discuss Scenario A PBL Solutions	Videos Readings Tutorials  Start Scenario B PBL	Videos Readings Tutorials  PBL Group Work	Videos Readings Tutorials  Scenario B PBL Presentations	Videos Readings Tutorials  Start Scenario C PBL	Videos Readings Tutorials  PBL Group Work	Videos Readings Tutorials  PBL Group Work	Videos Readings Tutorials  PBL Group Work	Videos Readings Tutorials  PBL Group Work	Videos Readings Tutorials  Scenario C PBL Presentations	Videos Readings Tutorials  Scenario C PBL Presentations	

Session	Theme	Activity	Preparation for Session
1	Introduction to the Course	1. Videos <ul style="list-style-type: none"> <li>Video Clip 1.1 - Course Introduction and Software Usage</li> <li>Video Clip 1.2 – Variances from Traditional HE Courses – PBL intro</li> <li>Video Clip 1.3 – Prensky and the concept of Digital Natives</li> </ul>	1. Readings <ul style="list-style-type: none"> <li>AEDT1120U: Course Outline</li> <li>Problem-based learning. (2016, August 31). Wikipedia. <a href="http://en.wikipedia.org/wiki/Problem-based_learning">http://en.wikipedia.org/wiki/Problem-based_learning</a></li> <li>Prensky, M. (2001). Digital natives, digital immigrants part 1. <i>On the horizon</i>, 9(5), 1-6. Retrieved from <a href="http://www.marcprensky.com/writing/Prensky%20-">http://www.marcprensky.com/writing/Prensky%20-</a></li> </ul>

		<p>2. Tutorial</p> <ul style="list-style-type: none"> <li>Analysis and synthesis questions based on videos</li> </ul>	<p><a href="#">%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf</a></p> <ul style="list-style-type: none"> <li>Prensky, M., &amp; Berry, B. D. (2001). Do they really think differently? <i>On the horizon</i>, 9(6), 1-9. Retrieved from <a href="http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part2.pdf">http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part2.pdf</a></li> </ul> <p>2. Discussion Forum in Blackboard</p> <ul style="list-style-type: none"> <li>Please post a response to the following: Do Digital Natives exist? Why? Why not?</li> </ul> <p>3. Assignments</p> <ul style="list-style-type: none"> <li>Begin working on the Scenario A PBL Assignment</li> </ul>
2	Collaboration	<p>1. Videos</p> <ul style="list-style-type: none"> <li>Video Clip 2.1 – The Role of Critical Review</li> <li>Video Clip 2.2 – Using the Using the Library to find PBL Resources</li> <li>Video Clip 2.3 - Constructing Knowledge within Community of Learners</li> </ul> <p>2. Tutorial</p> <ul style="list-style-type: none"> <li>Analysis and synthesis questions based on videos</li> <li>Discussion regarding Scenario A PBL Assignment</li> </ul>	<p>1. Readings</p> <ul style="list-style-type: none"> <li>Critique. (2016, August 1). <i>Wikipedia</i>. Retrieved from <a href="https://en.wikipedia.org/wiki/Critique">https://en.wikipedia.org/wiki/Critique</a></li> <li>Jonassen, D., Davidson, M., Collins, M., Campbell, J., &amp; Bannan Haag, B. (1995 ). Constructivism and Computer-Mediated Communication in Distance Education. <i>American Journal of Distance Education</i>, 9(2), 7-26. Retrieved from <a href="http://www.c3l.uni-oldenburg.de/cde/media/readings/jonassen95.pdf">http://www.c3l.uni-oldenburg.de/cde/media/readings/jonassen95.pdf</a></li> </ul> <p>2. Discussion Forum in Blackboard</p> <ul style="list-style-type: none"> <li>Please reflect on your Scenario A PBL findings and processes and respond to the following: What did you learn and how did you learn it?</li> </ul> <p>3. Assignments</p> <ul style="list-style-type: none"> <li>Submit Scenario A PBL Assignment by Sunday Sept 18 at 11:55 PM</li> </ul>
3	Historical Development of Computers: The Mainframe Era	<p>1. Videos</p> <ul style="list-style-type: none"> <li>Video Clip 3.1 (Scenario B PBL) – Exploring the Purposes of Digital Technology (F.J.D. chart)</li> </ul>	<p>1. Readings</p> <ul style="list-style-type: none"> <li>Desjardins, F., vanOostveen, R., Bullock, S., DiGiuseppe, M. &amp; Robertson, L. (2010). <i>Online Graduate Studies in Education: Examining student uses and attitudes towards digital technology</i>. A presentation at the annual conference of the</li> </ul>

		<ul style="list-style-type: none"> <li>• Video Clip 3.2 – Programmable Devices Concept</li> <li>• Video Clip 3.3 – Analog Computing to Eniac</li> </ul> <p>2. Tutorial</p> <ul style="list-style-type: none"> <li>• Analysis and synthesis questions based on videos</li> <li>• Questions Regarding Scenario B PBL Assignment</li> </ul>	<p>Canadian Society for the Study of Education, May 29 – June 1, 2010, Concordia University, Montreal, QC. Retrieved from <a href="http://eilab.ca/uploads/2010/06/gradsruevypresentation.pdf">http://eilab.ca/uploads/2010/06/gradsruevypresentation.pdf</a></p> <p>2. Discussion Forum in Blackboard</p> <ul style="list-style-type: none"> <li>• Please document the work on your Scenario B PBL Assignment and respond to the following: Describe the problem(s) that you identified from the video clips</li> </ul> <p>3. Assignments</p> <ul style="list-style-type: none"> <li>• Form Groups for Scenario B and C PBL Assignment and Major Culminating Task Assignment</li> <li>• Begin working on the Scenario B PBL Assignment</li> </ul>
4	Historical Development of Computers: The PC Era	<p>1. Videos</p> <ul style="list-style-type: none"> <li>• Video Clip 4.1 – Personal Computing Devices – It’s All about the Interface</li> <li>• Video Clip 4.2 - Software Suite Development – The Search for the ‘Killer’ App</li> </ul> <p>2. Tutorial</p> <ul style="list-style-type: none"> <li>• Group work on Scenario B PBL Assignment</li> </ul>	<p>1. Readings</p> <ul style="list-style-type: none"> <li>• History of operating systems. (2016, July 17). Wikipedia. Retrieved from <a href="https://en.wikipedia.org/wiki/History_of_operating_systems">https://en.wikipedia.org/wiki/History_of_operating_systems</a></li> </ul> <p>2. Discussion Forum in Blackboard</p> <ul style="list-style-type: none"> <li>• Continue to document the work on your Scenario B PBL Assignment</li> </ul> <p>3. Assignments</p> <ul style="list-style-type: none"> <li>• Continue working on the Scenario B PBL Assignment</li> </ul>
5	Historical Development of Computers: The Mobile Era	<p>1. Videos</p> <ul style="list-style-type: none"> <li>• Video Clip 5.1 – Interview, pt. 1 – Removing the Interface <a href="http://youtu.be/9IzFLLtZi1Q">http://youtu.be/9IzFLLtZi1Q</a></li> <li>• Video Clip 5.2 – Interview, pt. 2 – An App for Every Function <a href="http://youtu.be/x4dAphO4FV8">http://youtu.be/x4dAphO4FV8</a></li> <li>• Video Clip 5.3 Interview, pt. 3 – BYOD and Ubiquitous Mobile Computing <a href="http://youtu.be/KkVxt80od3c">http://youtu.be/KkVxt80od3c</a></li> </ul> <p>2. Tutorial</p>	<p>1. Readings</p> <ul style="list-style-type: none"> <li>• There are no additional readings this week.</li> </ul> <p>2. Discussion Forum in Blackboard</p> <ul style="list-style-type: none"> <li>• Reflect on your findings and what you have learned from the Scenario B PBL process</li> </ul> <p>3. Assignments</p> <ul style="list-style-type: none"> <li>• <b>Submit Scenario B PBL Assignment by Sunday Oct 19 at 11:55 PM</b></li> <li>• Begin working on the Major Culminating Task: Subtask 1 – Device/Application Choice and Rationale Document</li> </ul>

		<ul style="list-style-type: none"> <li>Group Presentations for Scenario B PBL Assignment Solutions</li> </ul>	
6	Technology and Learning and HCHI Competency Model	<ol style="list-style-type: none"> <li>Videos <ul style="list-style-type: none"> <li>Video Clip 6.1 (Scenario C PBL) - Jonassen – Technology and Learning</li> <li>Video Clip 6.2 (Scenario C PBL) - HCHI &amp; Competency and Interaction Model</li> </ul> </li> <li>Tutorial <ul style="list-style-type: none"> <li>Analysis and synthesis questions based on videos</li> <li>Questions Regarding Scenario C PBL Assignment</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>Readings <ul style="list-style-type: none"> <li>Jonassen, D.H., Peck, K.L. &amp; Wilson, B.G. (1999). <i>Learning with technology: A constructivist perspective</i>. New Jersey: Prentice Hall. P. 12-14.</li> <li>Excerpt from <i>Meaningful Learning with Technology</i>, by D. Jonassen, J. Howland, R.M. Marra, D. Crismond, 2008 edition, p. 5-10. Retrieved from <a href="http://www.education.com/reference/article/how-does-technology-facilitate-learning">http://www.education.com/reference/article/how-does-technology-facilitate-learning</a></li> <li>Desjardins, F. (2005). Teachers' Representations of their Computer Related Competencies Profile: Toward a Theory of ICT in Education, <i>Canadian Journal of Learning and Technology</i>, 31(1).</li> <li>Desjardins, F. J., Lacasse, R. &amp; Bélair, L. M., (2001). Toward a definition of four orders of competency for the use of information and communication technology (ICT) in Education, <i>Computers and Advanced Technology in Education: Proceedings of the Fourth IASTED International Conference, Calgary</i> : ACTA Press, pp. 213-217. Retrieved from <a href="http://eilab.ca/uploads/2001/06/DesjardLacas.pdf">http://eilab.ca/uploads/2001/06/DesjardLacas.pdf</a></li> </ul> </li> <li>Discussion Forum in Blackboard <ul style="list-style-type: none"> <li>Please document the work on your Scenario C PBL Assignment and respond to the following: Describe the problem(s) that you identified from the video clips</li> </ul> </li> <li>Assignments <ul style="list-style-type: none"> <li>Submit the Major Culminating Task: Subtask 1 – Device/Application Choice and Rationale Document</li> <li>Begin working on the Scenario C PBL Assignment</li> </ul> </li> </ol>
7	Epistemological Competencies	<ol style="list-style-type: none"> <li>Videos <ul style="list-style-type: none"> <li>Video Clip 7.1 - Redefinition of Learning – Higher Order Thinking</li> <li>Video Clip 7.2 – Computers as Thinking Tools</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>Readings <ul style="list-style-type: none"> <li>Garrison, D.R., Anderson, T., &amp; Archer, W. (2001). Critical thinking, cognitive presence and computer conferencing in distance education. <i>American Journal of Distance Education</i>, 15(1). Retrieved from</li> </ul> </li> </ol>

		<p>2. Tutorial</p> <ul style="list-style-type: none"> <li>• Analysis and synthesis questions based on videos</li> <li>• Questions regarding Scenario C PBL Assignment</li> </ul>	<p><a href="http://cde.athabasca.ca/coi_site/documents/Garrison_Anderson_Archer_CogPres_Final.pdf">http://cde.athabasca.ca/coi_site/documents/Garrison Anderson Archer CogPres Final.pdf</a></p> <p>2. Discussion Forum in Blackboard</p> <ul style="list-style-type: none"> <li>• Please continue to document the work on your Scenario C PBL Assignment</li> </ul> <p>3. Assignments</p> <ul style="list-style-type: none"> <li>• Begin working on Major Culminating Task: Subtask 2 – Storyboard Document</li> <li>• Continue working on the Scenario C PBL Assignment</li> </ul>
8	Informational Competencies	<p>1. Videos</p> <ul style="list-style-type: none"> <li>• Video Clip 8.1 - WWW Processes: Searching, Sorting, Creating</li> <li>• Video Clip 8.2 – Internet Processes: Aggregating, Filtering, Connecting to Ideas and People</li> </ul> <p>2. Tutorial</p> <ul style="list-style-type: none"> <li>• Analysis and synthesis questions based on videos</li> <li>• Questions regarding Scenario C PBL Assignment</li> </ul>	<p>1. Readings</p> <ul style="list-style-type: none"> <li>• There are no additional readings this week.</li> </ul> <p>2. Discussion Forum in Blackboard</p> <ul style="list-style-type: none"> <li>• Please continue to document the work on your Scenario C PBL Assignment</li> </ul> <p>3. Assignments</p> <ul style="list-style-type: none"> <li>• <b>Submit the Major Culminating Task: Subtask 2 –Storyboard Document</b></li> <li>• Continue working on the Scenario C PBL Assignment</li> </ul>
9	Social Competencies	<p>1. Videos</p> <ul style="list-style-type: none"> <li>• Video Clip 9.1 – Asynchronous/Synchronous Affordances</li> <li>• Video Clip 9.2 - Nethics and Netiquette</li> </ul> <p>2. Tutorial</p> <ul style="list-style-type: none"> <li>• Analysis and synthesis questions based on videos</li> <li>• Questions regarding Scenario C PBL Assignment</li> </ul>	<p>1. Readings</p> <ul style="list-style-type: none"> <li>• Hrastinski, S. (2008). Asynchronous &amp; Synchronous E-Learning. <i>Educause Quarterly</i> 4: 51-55. Retrieved from <a href="http://net.educause.edu/ir/library/pdf/eqm0848.pdf">http://net.educause.edu/ir/library/pdf/eqm0848.pdf</a></li> </ul> <p>2. Discussion Forum in Blackboard</p> <ul style="list-style-type: none"> <li>• Please continue to document the work on your Scenario C PBL Assignment</li> </ul> <p>3. Assignments</p> <ul style="list-style-type: none"> <li>• Begin working on the Major Culminating Task: Subtask 3 – Draft Script Document</li> <li>• Continue working on the Scenario C PBL Assignment</li> </ul>

10	Technical Competencies	<ol style="list-style-type: none"> <li>1. Videos <ul style="list-style-type: none"> <li>• Video Clip 10.1 – OS Interfaces</li> <li>• Video Clip 10.2 – Interface Issues</li> </ul> </li> <li>2. Tutorial <ul style="list-style-type: none"> <li>• Analysis and synthesis questions based on videos</li> <li>• Questions regarding Scenario C PBL Assignment</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Readings <ul style="list-style-type: none"> <li>• Technical Order Module from the Learning with ICT (I/S) B.Ed. course. Retrieved from <a href="http://faculty.uoit.ca/vanoostveen/ICT_course2011/module2_Technical_order-1.htm">http://faculty.uoit.ca/vanoostveen/ICT_course2011/module2_Technical_order-1.htm</a></li> </ul> </li> <li>2. Discussion Forum in Blackboard <ul style="list-style-type: none"> <li>• Please continue to document the work on your Scenario C PBL Assignment</li> </ul> </li> <li>3. Assignments <ul style="list-style-type: none"> <li>• <b>Submit the Major Culminating Task: Subtask 3 – Draft Script Document</b></li> <li>• Continue working on the Scenario C PBL Assignment</li> </ul> </li> </ol>
11	Interactions - The Web 1.0 & The Social Web 2.0	<ol style="list-style-type: none"> <li>1. Videos <ul style="list-style-type: none"> <li>• Video Clip 11.1 - Web 1.0 Surfing &amp; Creating</li> <li>• Video Clip 11.2 - Web 2.0 Social Networking</li> </ul> </li> <li>2. Tutorial <ul style="list-style-type: none"> <li>• Individual Presentations for the Scenario C PBL Assignment</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Readings <ul style="list-style-type: none"> <li>• Spivack, N. (2004). <i>New Version of My" Metaweb" Graph—The Future of the Net</i>. <i>Minding the Planet</i>, 15, 2008. Retrieved from <a href="http://www.novaspivack.com/science/new-version-of-my-metaweb-graph-the-future-of-the-net">http://www.novaspivack.com/science/new-version-of-my-metaweb-graph-the-future-of-the-net</a></li> </ul> </li> <li>2. Discussion Forum in Blackboard <ul style="list-style-type: none"> <li>• Please reflect on your findings, and what you have learned from the Scenario C PBL process</li> </ul> </li> <li>3. Assignments <ul style="list-style-type: none"> <li>• Submit the Scenario C PBL Assignment</li> <li>• Begin working on the Major Culminating Task: Subtask 4 – Creating and Posting of Final Video</li> </ul> </li> </ol>
12	Interactions - The Semantic Web 3.0 & The Metaweb 4.0	<ol style="list-style-type: none"> <li>1. Videos <ul style="list-style-type: none"> <li>• Video Clip 12. 1 - Web 3.0 Semantic Web</li> <li>• Video Clip 12.2 – Web 4.0 Metaweb</li> </ul> </li> <li>2. Tutorial <ul style="list-style-type: none"> <li>• Individual Presentations for the Scenario C PBL Assignment</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Readings <ul style="list-style-type: none"> <li>• Larson, L. (2012). <i>Web 4.0: The era of online customer engagement</i>. Retrieved from <a href="http://www.business2community.com/online-marketing/web-4-0-the-era-of-online-customer-engagement-0113733">http://www.business2community.com/online-marketing/web-4-0-the-era-of-online-customer-engagement-0113733</a></li> </ul> </li> <li>2. Discussion Forum in Blackboard</li> </ol>

			<ul style="list-style-type: none"> <li>• Please continue to reflect on your findings, and what you have learned from the Scenario C PBL process</li> </ul> <p>3. Assignments</p> <ul style="list-style-type: none"> <li>• <b>Submit the Major Culminating Task: Subtask 4 – Creating and Posting of Final Video no later than <b>SATURDAY DECEMBER 3, 2016</b></b></li> </ul>
--	--	--	---

Please Note: It is your responsibility to contact your Instructor if you are going to be absent before a tutorial session or if you have any questions or problems about meeting assignments in advance of the due date.

### 1. Required Texts/Readings

The professor works from a collection of on-line and/or print resources. Many of these texts and documents will be provided through the Blackboard course site, however students can also find an extensive collection of useful Internet links in this course web site, but the resources listed below have general utility and should be regarded as readings that will form part of their own professional library of texts and a matter to encounter for the course:

Cuban, L. (2001). *Oversold and underused: computers in the classroom*. Cambridge: Harvard University Press.

Hampel, R. (2006). Rethinking task design for the digital age: A framework for language teaching and learning in a synchronous online environment. *ReCALL*, 18, pp 105-121.

Kovalchick, A & Dawson, D. (2004). *Education and Technology: an Encyclopedia*. Santa Barbara: ABC-CLIO.

Tyner, K. (1998). *Literacy in a Digital World: Teaching and Learning in the Age of Information*. Erlbaum.

Wikibooks: *Instructional Technology*:

[http://en.wikibooks.org/wiki/Instructional\\_Technology](http://en.wikibooks.org/wiki/Instructional_Technology)

Key journals

- Adult Learning
- International Journal of Technologies in Higher Education / Revue internationale des technologies en pédagogie
- International Review of Research in Open and Distance Learning
- New Directions for Adult and Continuing Education

- Human Resources Development Quarterly
- Journal of Adult Education
- Journal of Higher Education
- Higher Education
- Review of Higher Education
- Canadian Journal of Higher Education
- Educational Gerontology
- Sociology of Education
- British Journal of Sociology of Education
- British Journal of Educational Technology
- Australasian Journal of Educational Technology

## 8. Evaluation Method

All assignments and tasks undertaken in this course must be accompanied by a copy of the appropriate rubric as completed by each individual, including all group work assignments). The instructor in the course will complete a copy of the rubric for the individual. For some tasks, such as the group based PBL activities, will require peers to complete the rubric as well. In all cases, each individual learner is required to review and combine all completed rubrics and to justify major discrepancies that exist between the completed rubrics with written statements in order to arrive at the final grade for the assignment.

### Rubric for Participation

Given the online format of this course it is essential that you are present and able to participate fully in our synchronous tutorial sessions as well as any asynchronous discussions that emerge during the course. This includes being prepared (i.e. doing the pre-readings) for each class. Participation will be self-assessed using the following rubric:

Objective/Criteria	Above Standard	At Standard	Approaching Standard	Below Standard
Content	Contributes factually correct, reflective and substantive content. Contributions are comprehensive, yet succinct, showing a strong understanding of the topic.	Contributes information that is factually correct; lacks full development of concept or thought. Contributions are thorough, showing a competent understanding of the topic.	Repeats but does not add substantive information to the discussion. Contributions are routine, showing a developing understanding of the topic.	Contributes information that is off-topic, incorrect, or irrelevant to the discussion. Contributions demonstrate only an emerging understanding of the material.

Connection	Contributes ideas that significantly illustrate the concepts under consideration, draws connections between theory and practice and provides a context for the topics in question.	Contributes ideas that help somewhat illustrate the concepts under consideration and draws some connections between theory and practice.	Contributes ideas which help illustrate the concepts under consideration but does not help draw connections between theory and practice.	Contributes ideas that do not significantly help in clarifying concepts or making a point.
References & Support	Uses references to literature, readings, or personal experience to support comments.	Incorporates some references from literature and personal experience.	Uses personal experience, but no references to readings or research.	Includes no references or supporting experience.
Collaboration	Responds to peers in a thoughtful manner, comparing and contrasting own viewpoint. Demonstrates an understanding and appreciation of convergent ideas and opinions.	Responds to peers and demonstrates a clear effort to consider other viewpoints and opinions.	Responds to peers, but responses often do not adequately consider other viewpoints and opinions.	Does not respond to peers.
Tone and Clarity	Uses clear, standard academic language to communicate ideas in a professional but engaging way.	Uses straightforward language that clearly conveys meaning.	Uses language that generally conveys meaning.	Uses language that impedes meaning because of errors in usage.

### Rubric for Problem Based Learning Scenarios (Scenario A, B and C PBL Assignments)

Learning within the context of the PBL scenarios will be self and peer assessed using the following rubric:

Objective/Criteria	Above Standard	At Standard	Approaching Standard	Below Standard
Problem Recognition	Demonstrates the ability to identify problems, as they were clearly defined in written statements.	Demonstrates the ability to identify problems with some assistance.	Demonstrates the ability to identify problems with a great deal of assistance.	Not able to identify any problems.
Organization & Structure	All arguments were clearly tied to an idea and	Most arguments were clearly tied to an idea and	All arguments were clearly tied to an idea but the	All arguments were not clearly tied to an idea.

	organized in a tight, logical fashion.	organized in a tight, logical fashion.	organization was sometimes not clear or logical.	
Understanding of the Topic	Demonstrates an understanding of information that is relevant, fosters higher-level thinking, and clearly relates to the skills and concepts to be developed.	Demonstrates an understanding of information that is semi-relevant, fosters higher-level thinking, and begins to relate to the skills and concepts to be developed.	Demonstrates an understanding of information that touches on relevant information, displays lower-level thinking, and begins to relate to the skills and concepts to be developed.	Demonstrates an understanding of information that is not relevant, discourages higher level thinking, and fails to relate to the skills and concepts to be developed.
Argument	All information presented in the argument was clear, accurate and thorough.	Most information presented in the argument was clear, accurate and thorough.	Most information presented in the argument was clear and accurate, but was not thorough.	Information had several inaccuracies or was usually not clear.
Solution	Evidence that multiple solutions were contemplated is provided; chosen solution is tested against the problem providing evidence of its success.	Evidence that a single solution was contemplated is provided; chosen solution is tested against the problem providing evidence of its success.	A single solution was contemplated but is vague. No evidence is given that the solution against the problem.	The solution is incomplete or vague; No evidence is given that the solution was tested against the problem.

PBL Assessment Rubric modified from Center for Teaching (2007). Example Rubric for Grading Problem-Based Learning Assignments. The University of Iowa: Iowa City. Retrieved July 5, 2012 from <http://centeach.uiowa.edu/materials/PBL%20Rubric.pdf> (Note the URL is no long active.)

### Rubric for Self/Peer Assessment of Collaborative Group Work

The work in this course will be conducted, for the most part, in small groups. The groups are expected to work collaboratively. Collaborative group work will be self and peer assessed using the following rubric:

Objective/Criteria	Above Standard	At Standard	Approaching Standard	Below Standard
Responsibility for Oneself	In addition to At Standard criteria:	<ul style="list-style-type: none"> <li>is prepared and ready to work with the team; is available for</li> </ul>	<ul style="list-style-type: none"> <li>is sometimes prepared and ready to work with the team</li> </ul>	<ul style="list-style-type: none"> <li>is not prepared and ready to work with the team</li> </ul>

	<ul style="list-style-type: none"> <li>exhibits self-imposed initiative</li> <li>asks for additional feedback to improve his or her work, beyond what everyone has been given</li> </ul>	<p>meetings and uses the team's communication system</p> <ul style="list-style-type: none"> <li>does what he or she is supposed to do without having to be reminded</li> <li>completes tasks on time</li> <li>uses feedback from others to improve his or her work</li> </ul>	<ul style="list-style-type: none"> <li>does some project tasks, but needs to be reminded</li> <li>competes some tasks on time</li> <li>sometimes uses feedback from others</li> </ul>	<ul style="list-style-type: none"> <li>does not do project tasks</li> <li>does not complete tasks on time</li> <li>does not use feedback from others to improve his/her work</li> </ul>
Helping the Team	<p>In addition to At Standard criteria:</p> <ul style="list-style-type: none"> <li>steps in to help the team when another member is absent</li> <li>encourages others to share ideas, helps to make them clear, and connects them to the team's work</li> <li>notices if a team member does not understand something and takes action to help</li> </ul>	<ul style="list-style-type: none"> <li>helps the team solve problems, manage conflicts, and stay focused and organized</li> <li>shares ideas that help the team improve its work</li> <li>gives useful feedback (specific and supportive) to others so they can improve their work</li> <li>offers to help others do their work if they need it</li> </ul>	<ul style="list-style-type: none"> <li>cooperates with the team but does not actively help it</li> <li>makes some effort to share ideas with the team</li> <li>sometimes gives useful feedback to others</li> <li>sometimes offers to help others</li> </ul>	<ul style="list-style-type: none"> <li>does not help the team solve problems; may cause problems</li> <li>does not share ideas with other team members</li> <li>does not give useful feedback to others</li> <li>does not offer to help others</li> </ul>
Respect for Others	<p>In addition to At Standard criteria:</p> <ul style="list-style-type: none"> <li>encourages the team to be respectful to each other</li> <li>recognizes everyone's strengths and encourages the team to use them</li> </ul>	<ul style="list-style-type: none"> <li>listens carefully to teammates</li> <li>is polite and kind to teammates</li> </ul>	<ul style="list-style-type: none"> <li>usually listens to teammates, but not always</li> <li>is polite and kind to teammates most of the time, but not always</li> </ul>	<ul style="list-style-type: none"> <li>does not pay attention to what teammates are talking about</li> <li>does not show respect for teammates (may interrupt, ignore ideas, hurt feelings)</li> </ul>

Modified from Buck Institute for Education (2011). Collaboration Rubric. Retrieved from [http://www.bie.org/images/uploads/useful\\_stuff/Collaboration\\_Rubric.pdf](http://www.bie.org/images/uploads/useful_stuff/Collaboration_Rubric.pdf)

**Rubric for Culminating Task (Video)**

The culminating assigned task for this course will be self and peer assessed using the following rubric:

<b>Objective/Criteria</b>	<b>Above Standard</b>	<b>At Standard</b>	<b>Approaching Standard</b>	<b>Below Standard</b>
Relevance	Video 'text' is on target and brings in more than one perspective to bear on the analysis or descriptions.	Video 'text' is on target and deals entirely with the subject both in general terms as well as with principal elements in a very specific manner.	Video 'text' treats some specific elements of the subject.	Video 'text' does refer to the subject at hand in a general manner.
Coherence and clarity	The overall structure is such that the arguments are presented in a clearly refutable manner as both concepts and logic are defined and followed.	Excellent structure allowing the audience to grasp all the ideas and understand the logical links between them.	The structure allows for good understanding of the relationships between the different parts of the video 'text'.	Ideas are presented but links are weak and difficult to follow.
Depth	All terms and concepts are defined in a formal manner and referenced, and some documented criticism are also identified.	All principal concepts are clearly defined with some references and justifications.	Main concepts are defined but without references.	Ideas presented without defining any terms or concepts.
Quality of language used	Publishable.... or almost!	Easy to view/listen to, where the ideas come forward in a clear, well-structured form.	Good form used and a notable effort has been made to facilitate viewing/listening.	Correct syntax and grammar used.

*Final course grades may be adjusted to conform to program or Faculty grade distribution profiles. Further information on grading can be found in Section 5 of the UOIT Academic Calendar.*

## 9. Assignments and Tests

Due Date	Assignment	Type	Value
Ongoing	Ongoing Participation	Individual	20%
Week 2	Scenario A PBL	Individual	5%
Week 5	Scenario B PBL	Group	15%
Week 11	Scenario C PBL	Group	20%
Week 6	Major Culminating Task: Subtask 1 – Device/Application Choice and Rationale Document	Group	10%
Week 8	Major Culminating Task: Subtask 2 – Storyboard Document	Group	10%
Week 10	Major Culminating Task: Subtask 3 - Draft Script Document	Group	10%
Week 12	Major Culminating Task: Subtask 4 - Creation and Posting of Final Video	Group	10%

Assignment criteria are specified in the detailed assignment descriptions. Read them carefully to be sure that you have fulfilled all aspects of the requirements. Assignments are DUE ON THE DAY indicated. Late assignments will be handled as follows:

- **Non-negotiated Late Assignment** - An assignment that has been posted late without prior agreement between the student and the professor to extend the time for the assignment to be handed in will be considered a non- negotiated late assignment and will be assigned a grade of zero.
- **Negotiated Late Assignment** - An assignment that has been handed in late in accordance with a mutually agreed deadline and penalty (if applicable) will be considered a negotiated late assignment and will be marked in accordance with the mutually agreed terms.
- **Extenuating Circumstances** - The professor will consider individually, rare extenuating circumstances, which may cause an assignment to be late. Examples of extenuating circumstances include hospitalization, death of a loved one, traffic accidents, etc. The student must provide documentation to validate the extenuating circumstance. It will be at the professor’s discretion to work out the extension in this situation.

### Detailed Assignment Descriptions

#### Ongoing Participation – 20%

Ongoing participation marks will be awarded for Participation in synchronous sessions as well as any asynchronous discussions. You will submit a completed Self-Assessment Rubric for Participation in Week 12.

### **Problem-Based Learning Scenarios – Total of 40% (A, B and C)**

Learning, as defined by the use of higher-order thinking to generate new understandings, in this course will be created using Problem-based Learning (PBL) strategies. These strategies require learners to engage in active learning opportunities in which each learner will be expected to:

- examine and try out what you know (knowledge)
- discover what you need (resources such as information)
- develop your people skills for achieving higher performance in teams
- improve your communications skills
- state and defend positions with evidence and sound arguments
- become more flexible in processing information and meeting obligations
- practice skills that you will need in your career

Landsberger, J. (2012). Study Guides and Strategies. Retrieved on July 8, 2012 from <http://www.studygs.net/pbl.htm>

The PBL scenarios are the major learning activities in this course. The Scenario A PBL Assignment will be done individually, and the Scenario B and C PBL Assignments will be tackled in groups of 3-4 max. Each group should work collaboratively, negotiating all understandings and documenting all work on the discussion forum in Blackboard.

Scenarios B and C will culminate in presentations that will occur during the tutorial sessions using the following schedule:

- Scenario B – Presentations Week 5
- Scenario C – Presentations must be scheduled for either Week 11 or Week 12

Immediately following your presentation for both Scenario B & C you will be expected to upload a copy of the presentation file (or a URL link) and a completed individual PBL Assessment Rubric and Collaboration Assessment Rubric to the Assignment Tool in Blackboard. Scenario B & C will also make use of peer assessment. Accordingly you may be asked to complete a PBL Peer Assessment Rubric for 1 or more of the presentations you attend.

### **Scenario A PBL Assignment - 5% (Discussion Week 2)**

**Problem:** The primary goal is for you to formulate an argument regarding whether Prensky is correct regarding the existence of Digital Natives and the implications for the educational system in the US (and by extension in Canada).

**Process:** Individually engage in a PBL process in which you will identify and actively seek out the knowledge and resources that will be necessary to fully understand the problem and create a solution(s) to the problem. You should move beyond opinion by gathering backing documentation from the literature. You will need to do some extensive reading of materials referenced in the Session 1 Readings and in Video Clip 1.3 and then

move further afield by finding your own resources. You should make use of the electronic resources available to you in through UOIT's online library.

Your solution can be in written format, or can be in a variety of alternate formats including audio, video, multimedia etc. Please be prepared to discuss your findings in the Week 2 tutorial session.

Prompts:

1. View Video Clip 1.3 and complete the Session 1 Readings
2. Identify the problem, specifically the differential between the current and desired situation,
3. Identify your role/perspective with respect to the problem,
4. Find and create the knowledge and resources possessed and required to understand the problem,
5. Find and create the knowledge and resources possessed and required to create a solution(s),
6. Create a solution(s),
7. Present your findings in a discussion to be conducted in the Week 2 tutorial session.
8. Submit a copy of your solution and a completed Self-Assessment for Scenario A PBL Assignment rubric to the Scenario A PBL Assignment Dropbox in Blackboard.
9. Reflect on your findings and the PBL process on the Discussion Forum in Blackboard.

### **Scenario B PBL Assignment – 15 % (Present Week 5)**

**Problem:** To be identified by the learners based on the context/scenario given in Video Clip 3.1 (Scenario B): Exploring the Purposes of Digital Technology

**Process:** As a group of 3-4 peers, you will work collaboratively to analyze the PBL Scenario B presented in Video Clip 3.1 and identify a problem of import to you that is referenced in the Video Clip. Once you have identified the problem, you will work at identifying the required knowledge and resources that you have available AND the knowledge and resources you will need to create and find in order to build a solution to your problem.

Document all of your work and your thoughts for each week while progressing on the Scenario B PBL Assignment Discussion. Group members will be responsible for presenting your solution during the Week 5 tutorial session. You may use any technologies that are available to you for your presentation.

Prompts:

1. View Video Clip 3.1.
2. Based on the contexts/scenarios given in the video clips, work collaboratively with your fellow group members to identify a problem as you perceive it.
3. With your group members, negotiate the details of the problem you will be working on.
4. Identify your group role/perspective with respect to the problem.
5. Find and create the knowledge and resources possessed and required to understand the problem.
6. Find and create the knowledge and resources possessed and required to create a solution(s).
7. Create a solution(s).
8. Present your group findings in your Week 5 tutorial session.
9. Submit the following to the Scenario B PBL Assignment Dropbox in Blackboard:
  - A copy of your presentation
  - A completed Self-Assessment for Scenario B PBL Assignment Rubric
  - A completed Peer-Assessment for Scenario B PBL Assignment Rubric (if required)
10. Reflect on your findings, what you have learned from the Scenario B PBL process on the Discussion Board in Blackboard.

### **Scenario C PBL Assignment – 20% (Present Week 11/12)**

Problem: To be identified by the learners based on the context/scenario given in Video Clip 6.1 (Scenario C PBL) - Jonassen – Technology and Learning and Video Clip 6.2 (Scenario C PBL) - HCHI & Competency and Interaction Model

Process: In the same group that you worked in for the Scenario B PBL Assignment, you will work collaboratively to analyze the PBL Scenario C presented in Video Clip 6.1 and Video Clip 6.2 and identify a problem of import to you that is referenced in the Video Clip. Once you have identified the problem, you will work at identifying the required knowledge and resources that you have available AND the knowledge and resources you will need to create and find in order to build a solution to your problem.

Document all of your work and your thoughts for each week while progressing on the Scenario C PBL Discussion Board in Blackboard. Group members will be responsible for presenting your solution during the Week 11 or 12 tutorial session. You may use any technologies that are available to you for your presentation.

Prompts:

1. View Video Clip 6.1 & 6.2.
2. Based on the contexts/scenarios given in the video clips, work collaboratively with your fellow group members to identify a problem as you perceive it.
3. With your group members, negotiate the details of the problem you will be working on.
4. Identify your group role/perspective with respect to the problem.

5. Find and create the knowledge and resources possessed and required to understand the problem.
6. Find and create the knowledge and resources possessed and required to create a solution(s).
7. Create a solution(s).
8. Prepare to individually present your group findings in the Week 11 or 12 tutorial session.
9. Submit the following to the Scenario C PBL Assignment Dropbox in Blackboard:
  - A copy of your presentation
  - A completed Self-Assessment for Scenario C PBL Assignment Rubric
  - A completed Peer-Assessment for Scenario C PBL Assignment Rubric (if required)
  - A completed Collaborative Group Work for Scenario C PBL Assignment Rubric
10. Reflect on your findings, what you have learned from the Scenario C PBL process on the Discussion Forum in Blackboard

**Major Culminating Task – Total of 40% (Subtask 1, Subtask 2, Subtask 3, and Subtask 4)**

In the groups established for the PBL scenarios, you will create a 10-15 minute video analyzing a technological device or application. Devices refer to primarily hardware based devices, such as the iPad, Clickers, Smartboards, Probeware, etc., which can be used for learning purposes. Applications refer to primarily software based programs, such as WordPerfect Office, MS Office, Google Docs, Twitter, Zotero, Delicious, etc. The applications may be stand-alone or browser based and should have some utility for the purposes of learning.

Prompts:

1. Trace the historical development of the specific device and/or application.
2. Analyze the relationship of the technology to teaching/learning opportunities as described in the HCHI model, specifically identifying which of the competencies (Technological, Informational, Social or Epistemological) are primarily promoted and how the development of these competencies is supported by the technology. In all cases at least 2 competencies must be addressed, i.e., the technical and at minimum one of the others. In some instances 3 or more competencies, i.e., the technical and 2 or 3 of the others, may be addressed by the technology.
3. The resulting product must be an academic type video, in the sense of stating a thesis and then developing a convincing argument throughout the video.
4. The video should be based on ideas generated throughout the course.

You may use any technologies that are available to you for the generation of the supporting documents (Device/Application Choice and Rationale, Storyboard, Script and Final Video).

**Subtask 1 – Device/Application Choice and Rationale Document - 10%**

In a 350 word document, choose a technological device or application and give the group rationale for the choice. Submit your Device/Application Choice and Rationale Document to the Major Culminating Task: Subtask 1 – Device/Application Choice and Rationale Document Assignment Dropbox in Blackboard.

### **Subtask 2 – Storyboard Document - 10%**

Create a storyboard for the final video. The storyboard, using a timeline view, should outline all of the graphical elements, linked to a basic description of the accompanying text that will be used in your video. Please submit your Storyboard Document to the Major Culminating Task: Subtask 2 – Storyboard Document Assignment Dropbox in Blackboard.

### **Subtask 3 – Draft Script Document - 10%**

Create a script for your video. The script must be complete with a description of all the audio components, using a timeline view, utilized in your video. Please submit your Draft Script Document to the Major Culminating Task: Subtask 3 – Draft Script Document Assignment Dropbox in Blackboard.

### **Subtask 4 – Creation and Posting of Final Video - 10%**

Create a 10-15min. video & provide the finalized script complete with APA references, analyzing a technological device and/or application. Upload your completed video to YouTube as an unlisted video. There is a 15 min. maximum that is allowed by YouTube so you must ensure that you are under this limit. Submit the following to the Major Culminating Task: Subtask 4 - Creation and Posting of Final Video Assignment Dropbox in Blackboard:

- A link to your video on YouTube
- A copy of your finalized script
- A completed Self-Assessment for Major Culminating Task Rubric
- A completed Collaborative Group Work for Major Culminating Task Rubric

## **10. Accessibility**

Students with disabilities may request to be considered for formal academic accommodation in accordance with the Ontario Human Rights Code. Students seeking accommodation must make their requests through Student Accessibility Services. Requests must be made in a timely manner, and students must provide relevant and recent documentation to verify the effect of their disability and to allow the university to determine appropriate accommodations.

Accommodation decisions will be made in accordance with the Ontario Human Rights Code. Accommodations will be consistent with and supportive of the essential requirements of courses and programs, and provided in a way that respects the dignity of students with disabilities

and encourages integration and equality of opportunity. Reasonable academic accommodation may require instructors to exercise creativity and flexibility in responding to the needs of students with disabilities while maintaining academic integrity.

### **11. Academic Integrity**

Students and faculty at UOIT share an important responsibility to maintain the integrity of the teaching and learning relationship. This relationship is characterized by honesty, fairness and mutual respect for the aim and principles of the pursuit of education. Academic misconduct impedes the activities of the university community and is punishable by appropriate disciplinary action.

Students are expected to be familiar with and abide by UOIT's regulations on Academic Conduct (Section 5.15 of the Academic Calendar) which sets out the kinds of actions that constitute academic misconduct, including plagiarism, copying or allowing one's own work to be copied, use of unauthorized aids in examinations and tests, submitting work prepared in collaboration with another student when such collaboration has not been authorized, among other academic offences. The regulations also describe the procedures for dealing with allegations, and the sanctions for any finding of academic misconduct, which can range from a resubmission of work to a failing grade to permanent expulsion from the university. A lack of familiarity with UOIT's regulations on academic conduct does not constitute a defense against its application.

Further information about academic misconduct can be found in the Academic Integrity link on your laptop. Extra support services are available to all UOIT students in academic development, study skills, counseling, and peer mentorship. More information on student support services can be found in the Academic Calendar (Section 8).

### **12. Turnitin**

UOIT and faculty members reserve the right to use electronic means to detect and help prevent plagiarism. Students agree that by taking this course all assignments are subject to submission for textual similarity review by Turnitin.com. Assignments submitted to Turnitin.com will be included as source documents in Turnitin.com's restricted access database solely for the purpose of detecting plagiarism in such documents for five academic years. The instructor may require students to submit their assignments electronically to Turnitin.com or the instructor may submit questionable text on behalf of a student. The terms that apply to UOIT's use of the Turnitin.com service are described on the Turnitin.com website.

Students who do not wish to have their work submitted to Turnitin.com must provide with their assignment at the time of submission to the instructor a signed Turnitin.com Assignment Cover sheet:

<http://www.uoit.ca/assets/Academic~Integrity~Site/Forms/Assignment%20Cover%20sheet.pdf>

Further information about Turnitin can be found on the Academic Integrity link on your laptop.

### 13. Freedom of Information and Protection of Privacy Act

The following is an important notice regarding the process for submitting course assignments, quizzes and other evaluative material in your courses in the Faculty of Education. As you may know, UOIT is governed by the *Freedom of Information and Protection of Privacy Act* ("FIPPA"). In addition to providing a mechanism for requesting records held by the university, this legislation also requires that UOIT not disclose the personal information of its students without their consent.

FIPPA's definition of "personal information" includes, among other things, documents that contain both your name and your Banner ID. For example, this could include graded test papers or assignments. To ensure that your rights to privacy are protected, the Faculty of Education encourages you to use only your Banner ID on assignments or test papers being submitted for grading. This policy is intended to prevent the inadvertent disclosure of your information where graded papers are returned to groups of students at the same time. If you still wish to write both your name and your Banner ID on your tests and assignments, please be advised that UOIT will interpret this as an implied consent to the disclosure of your personal information in the normal course of returning graded materials to students.

If you have any questions or concerns relating to the new policy or the issue of implied consent addressed above, please contact [accessandprivacy@uoit.ca](mailto:accessandprivacy@uoit.ca)

### 14. Course Evaluations

Student evaluation of teaching is a highly valued and helpful mechanism for monitoring the quality of UOIT's programs and instructional effectiveness. To that end, course evaluations are administered by an external company in an online, anonymous process during the last few weeks of classes. Students are encouraged to participate actively in this process and will be notified of the dates. Notifications about course evaluations will be sent via e-mail, and posted on Blackboard, Weekly News and signage around the campus.