



CI 201: Introduction to Digital Environments

Department of Curriculum & Instruction
UIUC College of Education

I. Basic Course Information

Semester:	Fall 2016	Class Location:	TBD
Course Meeting Days:	Tues & Thurs	Credit Hours:	3
Course Meeting Hours:	2:00 – 3:20		

II. Instructor Information

Instructor:	Robb Lindgren	Office Address:	Education Building #394 1310 S. 6th St.
Email Address:	robblind@illinois.edu		
Office Hours:	TBD	Office Phone:	217-244-3655

III. Course Description

This course surveys a broad range of digital environments in order to understand their potential impact on teaching and learning. Introducing theories of digital literacies, multimedia, immersion, etc., students will analyze, synthesize, and evaluate the learning and instructional potential of popular digital environments ranging from simulations and social networks to virtual worlds and videogames. The course will mix instructor lectures and class discussion with small group activities. When possible students will interact with digital platforms in class, and students will work in small groups to do a design project around a digital environment of their choice.

IV. Course Objectives

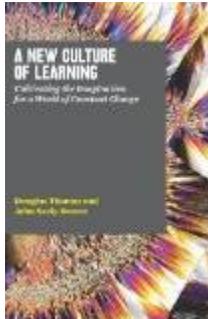
- To understand the basic features of digital environments and theories of interactivity that are pertinent to those environments
- To understand the constraints and affordances of digital environments for teaching and learning
- To be able to critically examine existing digital environments for their ability to facilitate instruction and achieve learning outcomes
- To become familiar with popular and emerging digital environments
- To develop new designs for applying digital environments to address critical educational needs
- To work in a team to create original digital environment designs that have the potential to promote learning and education

V. Prerequisites

None

VI. Textbooks

There are two required texts for the course listed below. All supplemental readings will be provided by the instructor.



Thomas, D., & Brown, J. S. (2011). *A new culture of learning: Cultivating the imagination for a world of constant change*. Lexington, KY: CreateSpace.



DePietro, P. (2013). *Transforming Education with New Media: Participatory Pedagogy, Interactive Learning and Web 2.0*. P. Lang.

VII. Grading Policy

Assignment/Activity	Points	Percent of Final Grade
Digital Environment Group Presentation	75	15%
Midterm Critical Environment Analysis	125	25%
Digital Environment Design Project		
Student Report/Reflections	50	10%
Group Final Design	150	30%
Group Final Presentation	50	10%
*Participation (Discussion, Game Pitches, In-Class Activities)	50	10%
Totals	500	100%

You and your project partners are welcome to come speak with me during my office hours about any questions regarding grading; however, you must do so within 1 week of a grade being posted.

Letter grades will be assigned based on the percentage of total points earned for the course.

Grading Scale (%)	
94-100	A
90-93	A-
87-89	B+
84-86	B
80-83	B-
77-79	C+
74-76	C
70-73	C-
67-69	D+
64-66	D
60-63	D-
0 - 59	F

VIII. Assignments, Projects, and Exams

Digital Environment Group Presentation (15%)

In the first week you will sign up to do a presentation on one of the digital environments listed for each of the remaining weeks of the course. Depending on the number of students in the course, this presentation will be done in groups of 1-3 students. This should be an interactive presentation where other students in the class are given the opportunity to use or experience the digital technology in some way. Presentation groups will need to discuss their plans with the instructor in advance of the presentation.

Midterm Critical Environment Analysis (25%)

Mid-way through the semester students will submit a 4-page paper that describes and evaluates a specific digital environment with a focus on its strengths and affordances for learning and/or instruction. Using the theories and design principles we have discussed in class, students will develop and apply criteria to assess the effectiveness of an environment of their choice. The digital environment could be a commercial product or a research platform. Ideally this environment would be in the same category as the environment the student’s group will design for the final product.

Digital Environment Design Project (10% Ind. Report + 30% Group Design + 10% Final Presentation)

For this project the student will choose one of the digital environments discussed during the course and create a design/prototype that addresses an interesting educational/learning problem (anything from cultural sensitivity to problem solving in science to adult literacy). You will need to describe how you will structure the environment (e.g., how the technology will be distributed in a classroom, museum, or the layout of a purely virtual world) and how this structure supports your desired educational outcome (productive discussion, knowledge gains, cultural awareness, etc.). Your group will create a prototype—some visual presentation that demonstrates the experience of participating in your digital environment. 150 pts (30%) will be allocated towards the quality of the digital environment design and the supporting description in a 4-page paper. 50 pts (10%) will be allocated

for a short individual report that describes the individual's role in the project and their personal assessment of the game and group process. 50 pts (10%) will be allocated for the group presentation at the end of the course where the design is described/demonstrated to the class.

Participation (10%)

50 pts in the course (10%) will be allocated for participation in class discussion, providing useful resources and answering questions for other students, participating in small group activities. If implemented, reading quizzes will also be included in your participation grade (see the section on Reading Quizzes below).

IX. Late Work

Assignments must be turned in by class time on the date they are due. In general late work is not accepted so make sure you have backed up all your work (e.g., U of I Box) and start your assignments early. Because you will be working in groups in the second part of the course it is important that you communicate with your group about any circumstances in your life that will affect your participation.

If you do experience a personal emergency that hinders your ability to do the work in this class, please notify the instructor and the project group as soon as possible. It will be difficult to make accommodations for you if you wait to inform the instructor about these events until the end of the course.

X. Attendance and Participation

Students are expected to show up to class on time and be prepared to participate in class discussions. Two unexcused absences are allowed per semester—you can miss class two times without having to give me a reason and without penalty. Up to two additional absences will be permitted for appropriate reasons (illness, family emergencies) *if you notify me of your absence ahead of time* (email me to tell me that you will be absent and why). Every absence in excess of two unexcused absences will result in a 10 point (2%) reduction. I will take roll at the beginning of class, so if you are late it is your responsibility to make sure that you are not marked absent for the day. If you are excessively late (e.g., you've missed half the class), I will mark you absent.

Finally, please be respectful of other students in the class and the instructor by putting your **cell phones on silent and muting your laptops**. Laptops will be allowed for note-taking purposes, but there may be certain days and activities for which I'll ask people to put their laptops away.

***Reading Quizzes:** I will begin the course with the assumption that everyone is making a reasonable effort to keep up with the readings. This is important because it makes class discussions more interesting and valuable. As long as I have this perception that people are keeping up with the readings, there will be no reading quizzes. If I start to feel that people are not keeping up with the readings, I reserve the right to start implementing periodic and unannounced quizzes that will be applied to your participation points for the class.

XI. Technology

Students are required to have access to word processing software. It is expected that students of this class will use technology during class to take notes, experiment with various digital environments (during appropriate class discussions), show examples, etc. It is also expected that these technologies will not be used during class for purposes outside the scope of the course.

When sending me email, please include the course prefix and course number in the subject line of your email. For example, for this course your subject line should include “CI481” in all emails you send me regarding this class or assigned coursework.

No recording devices are allowed without explicit written consent from the instructor.

XII. Academic Integrity

Please refer to the Illinois Student Code Article 1, Part 4 for the statement on Academic Integrity at the following URL: <http://www.admin.uiuc.edu/policy/code/>

Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policy. Please note that you are responsible for reading this policy. Ignorance is not an excuse for any academic dishonesty.

XIII. Students with Disabilities

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TDD), or e-mail a message to disability@uiuc.edu.

To insure that disability-related concerns are properly addressed from the beginning, students with disabilities who require assistance to participate in this class are asked to see the instructor as soon as possible. If you need accommodations for any sort of disability, please speak to me after class, or make an appointment to see me, or see me during my office hours.

XIV. Course Schedule (tentative)

The class schedule may change at any time. I will make any announcements regarding changes to our schedule in class during lecture. Major deadlines and presentation dates are noted. If you miss a lecture, contact a classmate for notes.

NCL = New Culture of Learning (Thomas & Brown, 2011)

TENM = Transforming Education with New Media (DePietro, 2013)

Week	Date / Topic	Readings	Assignments / Activities/Notes
1	Course Introduction	<i>NCL Chapter 1, 2</i>	
	Key Ideas for Digital Environments 1: Interactivity	<i>Papert (1980) Mindstorms Chapter 1;</i> <i>TENM Chapter 4</i>	
2	Key Ideas for Digital Environments 2: Immersion and Presence	<i>Dede (1999) Evolution of Constructivist Learning Environments;</i> <i>Dede (2009) Immersive Interfaces for Engagement and Learning</i>	
	Key Ideas for Digital Environments 3: Multimedia Learning Theory	<i>Mayer(2002) Multimedia Learning</i>	
3	Key Ideas for Digital Environments 4: Digital Literacies	<i>NCL Chapter 7;</i> <i>TENM Chapter 3</i>	
	Key Ideas for Digital Environments 5: Activity Systems and Collaboration	<i>NCL Chapter 4</i>	
4	Online Learning Platforms	<i>TENM Chapter 10;</i> <i>Anderson (2008) Towards a Theory of Online Learning</i>	
	MOOCs	<i>Daniel (2012) Making Sense of MOOCs</i>	
5	Social Networks, Wikis, and	<i>NCL Chapter 5;</i> <i>Dabbagh & Kitsantas (2011).</i>	

	Blogs 1	<i>Personal learning environments, social media, and self-regulated learning</i>	
	Social Networks, Wikis, and Blogs 2	<i>TENM Chapter 6; Richardson (2010) Chapter 1</i>	
6	Online Video	<i>Schwartz & Hartman (2007) Designing Digital Video for Learning and Assessment</i>	
	Simulations	<i>de Jong (2006) Computer Simulations; Wieman et al. (2008) Simulations that Enhance Learning</i>	
7	Virtual Environments 1	<i>Lindgren et al. (2014) Virtual Environments for Conceptual Learning</i>	
	Virtual Environments 2	<i>Dalgarno & Lee (2009) What are the Learning Affordances of 3-D Virtual Environments?</i>	
8	Video Games 1	<i>TENM Chapter 14; Gee (2007) Chapter 1</i>	
	Video Games 2	<i>Squire (2011) Chapter 2</i>	<i>Midterm Critical Environment Analysis Due</i>
9	Tablets and Mobile Devices 1: Educational Apps	<i>TENM Chapter 12; Sharples (2009) Small Devices, Big Issues</i>	
	Tablets and Mobile Devices 2: eReaders and eTextbooks	<i>Sloan (2012-2013) Using an E-Textbook and an iPad</i>	
10	Virtual and Physical Hybrids 1: AR and Google Glass	<i>Bower (2014) Augmented Reality and Education</i>	
	Virtual and Physical Hybrids 2: Mixed Reality and Motion Input Platforms (Kinect, etc.)	<i>Lindgren and Johnson-Glenberg (2013)</i>	
11	Digital Classrooms 1	<i>Higgins, Mercier, et al. (2011) Multi-touch Tables and Collaborative Classroom</i>	

		<i>Pedagogies</i>	
	Digital Classrooms 2	<i>Lui & Slotta (2013). Immersive Simulations for Smart Classrooms</i>	
12	Digital Informal Environments 1: Museums, Science Centers, Zoos	<i>Bowen et al. (2008). Digital Technologies and the Museum Experience</i>	
	Digital Informal Environments 2: Digital Fabrication Labs	<i>Blikstein (2013) Digital Fabrication and 'Making'in Education</i>	
13	Robots	<i>Alimisis (2012). Robotics in Education & Education in Robotics</i>	
	Toys	<i>Pesce (2000). The Playful World: How Technology is Transforming our Imagination</i>	
14	No Class (Thanksgiving Break)		
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15	Student Project Presentations		<i>Final Project Reports Due</i>
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