

# Lib 686: Emerging Technologies

### **Winter 2013**

#### 3 Credits • Online

Instructor	Phone	Office	Email	Office Hours
Dr. Mary Bucy	503-838-8794	ED 202M	bucym@wou.edu	T 12:30—3:30 R 3:00—5:00

#### **Course Description:**

A study of current and emerging information systems from a philosophical and practical perspective. The origins, storage, transmission, and retrieval of information will be explored, as well as the technologies that assist these activities.

#### Text:

No textbook is required. Readings will be provided in our online class, and we will also be accessing many online resources.

# **Course Objectives:**

- ◆ Heighten awareness of the impact of the information revolution on society and the school, as well as on individuals.
- Increase knowledge and skills in using emerging information technology.
- Form an educated opinion regarding uses of technology in future learning environments.
- Heighten awareness of the important individuals and documents that form the base for the information technology field.

#### **Course Format**

This is an online course with no meetings at WOU. The course will include a variety of readings, videos, podcasts, online demonstrations, activities, assignments, and online discussions. Although there is some flexibility because it is an online course, students are expected to keep up with the readings and respond to discussion questions in a timely manner. Otherwise the online discussions are not effective. Please pay attention to posted deadlines.

This course will be taught as a series of different topics with a new topic introduced each week. New topics will be posted by 8:00 am each Tuesday. All initial discussion responses are due no later than Saturday evening by midnight. Responses to posts by other students are due by midnight on Monday. All other assignments are due by Monday night at midnight. You will be expected to log in to check discussions and other announcements several times each week.

#### **Online Discussions**

Students are expected to do scheduled readings, respond to questions by the posted date and time and then respond to other students and the instructor. Appropriate responses make a substantial contribution to the discussion. Do not simply reply, "I like that, good job." Rather, add new ideas of your own, cite views from readings, comment on why you find a particular idea intriguing, or lead us to related articles.

### **Class Assignments and Expectations:**

- 1. Read articles and explore resources assigned weekly and be prepared to actively participate in online discussions of the issues raised in these articles.
- 2. Technology Show and Tell: "Discover" a new technology and prepare an online presentation that will be shared with the class. Details will be provided online.
- 3. Participate in an Expert Panel Discussion, representing the viewpoint of a well-known individual in the field of information technology. Present a short biography and summary of views, and with others on the panel, field questions posed by class members. Details will be provided online.
- 4. Complete a final paper addressing future trends in information technologies. Details will be given during class.

**Grading** 

	Pts
Class participation	25
Technology Show and Tell	25
Expert Panel Discussion	25
Final Paper	25
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Grades (%)		
A	93-100	
A-	90-92	
B+	88-89	
В	83-87	
B-	80-82	
C+	78-79	
С	73-77	
C-	70-72	
D	60-69	
F	below 60	

**Class Schedule** (subject to change – see course web site for updates)

Week	Topics
1	Introductions
1/7–1/14	Brief history of communication technologies Intro to course content, format and requirements

2			
<u>-</u>	Internet		
1/15–1/21	Moving online		
	Effects on our thinking		
3	Information production		
	Writing		
1/22–1/28	Images		
	Publishing		
4	Information production		
1/29–2/4	Multimedia and the Web		
	Interactive content		
5	Information Transfer (2-way)		
	E-mail		
	Chat		
2/5–2/11	Video conference		
	Distance learning and open courseware		
	Mobile technologies		
6	Information Transfer (2-way)		
	Podcasts		
2/12-2/18	Blogs		
	Wikis Social Networking		
7	Social Networking		
7	Information storage & retrieval		
	The changing library		
	Filtering and censorship Open Source		
2/19-2/25	Scholarly work online		
2/19-2/23	Information literacy		
	Collective intelligence		
	Predictive analysis		
8	Virtual Reality		
_	Virtual reality		
2/26-3/3	Virtual worlds		
9	Artificial Intelligence		
3/4-3/10	Artificial Intelligence		
	Expert Systems		
	Sensors / Robotics		
	Speech Recognition		
10	Information Technology and Education		
3/11-3/17	Students today		
	The changing school		
	New literacies		
Finals Week	_		
3/17-3/21	Final Position Papers due		

### **Some Tips for Navigating Moodle**

- 1. All assignments, activities, etc. will be identified in the Unit Overview to ensure that you are aware of them. However, actual assignments will be listed under a separate heading in the Unit. The screen will show the assignment and due date and will have a place at the bottom for you to upload your assignment. Please put your name on the assignment and upload it. All assignments are to be submitted in Word, unless otherwise noted. If this is a problem, let me know and we will determine another way for you to submit assignments.
- 2. Any time you wish to return to the main page, go to the top of the page you are on and click on the course number. Some websites are set to open in a separate window. In this case, simply close the window when you are done and our Moodle site will be open underneath it.

### **Guidelines for a Successful Online Course**

Modified from Palloff, R. & Pratt, K. (2007). Building Online Learning Communities: Effective Strategies for the Virtual Classroom. Jossey-Bass: San Francisco, CA.

- 1. This is not a self-paced course. It is designed on a weekly format and to be successful you will need to login to check the course several times each week.
- 2. Discussions require frequent checking and participation. Check often. Stay current and up-to-date. Replies posted late will not become a part of the discussion and will likely be missed by other participants. Discussions cannot be "caught-up" once others have moved on. Monitor discussions for responses to your own posts and be prepared to post follow-up messages.
- 3. If possible, complete readings near the beginning of the week so that you have time to think about them and draw from them as you complete assignments and/or discussions for the week.
- 4. Have contingency plans for computer problems. Become familiar with the Internet services at your public library. Seek out friends or family members who will let you use their Internet services in the case yours crashes. Do not expect to be able to catch up after missing two or more weeks of class.
- 5. Online learning happens in real time. As with on-campus classes, you will need to juggle your commitments even when personal or work activities encroach on your study time. Your success depends upon your ability to master course content at the same time you deal with other life challenges. If an unforeseen event occurs and work cannot be submitted on time, get yourself back on track as soon as possible. Contact me immediately if you are having problems. I am understanding and will work with you, but it is difficult to help when students fall far behind.
- 6. Because this is an online class, your schedule can be quite flexible. This does not mean, however, that there is less work than in a 3-credit face-to-face class. Graduate courses at WOU carry an expectation of 4 hours of homework for every 1 hour in class. This equates to 15 hours/week for a 3-credit course. While this will vary from week to week and there will certainly be light weeks, please be prepared to schedule your time to manage weeks when there is a heavy workload. I will do my best to make this manageable, and I think you will find our readings and assignments to be interesting and relevant.

#### What You Can Expect of Me as Your Instructor:

Modified from Palloff, R. & Pratt, K. (2007). Building Online Learning Communities: Effective Strategies for the Virtual Classroom. Jossey-Bass: San Francisco, CA.

- 1. I understand the uncertainties of online communication. When you email me, I will respond within 48 hours (usually much faster). If you send me something, I will respond with a "Got it" email. If you do not hear from me, check to make sure I received it. (Assignments submitted on Moodle should show you when they have been posted successfully).
- 2. Open communication and instructor availability are critical to the success of an online course. Email me any time you have questions. This is the fastest way to reach me. If you need to talk by phone, my number is 503-838-8794. Please email me to let me know you are trying to reach me by phone and I will arrange an appointment to talk.
- 3. Please email me anytime you are confused or unclear on instructions. I will respond quickly. If your question would be of interest to others in the class, I will post my responses on our course announcements page.
- 4. Although I may be traveling for conferences a few times during the term, I will continue to check our class regularly. If for any reason I will be unable to connect, I will post a message to let you know.
- 5. I will do my best to respond to assignments with feedback within a week. Because I have two other online classes, I may have conflicts that slow this down. Please know that I will do my best to provide feedback as quickly as possible.

# Plagiarism policy

Much of the work we do in this class involves using online electronic texts and images as a resource. If you use material you have found online, you are expected to acknowledge the source and, in the case of text, paraphrase as appropriate. If you use another writer's words, you must put those words in quotation marks (or use block quote formatting) and formally cite where they came from. If you cut and paste text or any other material without crediting your source, you are plagiarizing. Plagiarism is unethical and can lead to a failing grade.

# **WOU Student Support Services Available**

- Disability Accommodation: If you have a documented disability that my require assistance, you will need to contact the Office of Disabilities Services (ODS) for coordination in your academic accommodations. The ODS is located in the Academic Programs and support Center (APSC) Suite 405. The phone/TTY is (503) 838-8250
- Writing Center (<u>www.wou.edu/las/humanities/writingctr</u>)
- Learning Resource Center (www.wou.edu/provost/aalc/learning)
- Counseling Center (http://www.wou.edu/student/health)
- Department or College Resources

# **Background Reading**

- Auletta, K. (2009). Googled: The End of the World as We Know It. Penguin Press: NY
- Bauerlein, M. (2008). The Dumbest Generation: How the Digital Age Stupifies Young Americans and Jeopardizes Our Future. Tarcher/Penguin: NY
- Birkerts, S. (1995). The Gutenberg Elegies: The Fate of Reading in an Electronic Age.
- Bonk, C. (2009). The World is Open: How Web Technology is Revolutionizing Education. Jossey-Bass: San Francisco, CA
- Brand, S. (1987) The Media Lab. Penguin Books, NY.
- Brown, J. & Duguid, P. (2002). The Social Life of Information. Harvard Business School Press.
- Brugioni, D.A. (1999). *Photo Fakery: The History and Techniques of Photographic Deception and Manipulation*. Brassey's: Dulles, Virginia.
- Budinger, T. & Budinger, M. (2006). *Ethics of Emerging Technologies: Scientific Facts and Moral Challenges*. John Wiley & Sons, Hoboken, NJ.
- Burniske, R. (2001). Literacy in the Cyberage. Corwin Press.
- Burniske, R. & Monke, L. (2001). *Breaking Down the Digital Walls: Learning to Teach in a Post-Modem World*. State University of New York Press.
- Christakis, N. & Fowler, J. (2009). *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives*. Little, Brown & Co.
- Carr, N. (2008). *The Big Switch: Rewiring the World, from Edison to Google*. WW Norton & Company, Inc: NY
- Carr, N. (2011). The Shallows: What the Internet is doing to our Brains. WW Norton & Co.
- deKerckhove, D. (1995). *The Skin of Culture: Investigating the New Electronic Reality*. Somerville House, USA
- Dertouzos, M. (1997). What Will Be: how the new world of information will change our lives. HarperCollins, NY.
- Dreyfus, H, & Dreyfus, S. (1986). Why computers may never think like people. *Tech Review*. January, pp. 42-61.
- Dyson, E. (1998). Release 2.0: A Design for Living in the Digital Age.
- Franklin, U. (1990) *The Real World of Technology*. CBC Massey Lecture Series. House of Anansi Press Limited.

- Friedman, T. (2005). The World is Flat. Picador, NY.
- Ito, M. & multiple authors. (2009) *Hanging out, Messing Around, and Geeking Out: Kids Living and Learning with New Media*. MIT Press: Cambridge, MA
- Johnson, S. (1999). Interface Culture. Basic Books.
- Johnson, S. (2002). Emergence: The Connected Lives of Ants, Brains, Cities, and Software. Scribner.
- Johnson, S. (2006). Everything Bad is Good for You. Penguin Group: NY
- Gates, B. (1995) The Road Ahead. Viking-Penguin.
- Kelly, K. (1995) Out of Control: The New Biology of Machines, Social Systems, & the Economic World. Basic Books.
- Lanham, R. (1995). *The Electronic Word: Democracy, Technology, and the Arts*. The University of Chicago Press.
- Lanier, J. (2010). You are Not a Gadget. Knopf
- Lessig, L. (2002). The Future of Ideas: The Fate of the Commons in a Connected World. Vintage
- Lessig, L. (2005). Free Culture: The Nature and Future of Creativity. Penguin Books.
- McLuhan, M. (1964). Understanding Media: the Extensions of Man. McGraw-Hill.
- McGann, J. (2004). Radiant Textuality: Literature after the World Wide Web. Palgrave Macmillan.
- Meyrowitz, J. (1985). No Sense of Place: The Impact of Electronic Media on Social Behavior. Oxford University Press.
- Minski, M. (1988). *The Society of Mind*. Simon and Schuster.
- Minski, M. (2007). *The Emotion Machine: Commonsense Thinking, Artificial Intelligence, and the Future of the Human Mind.* Simon & Schuster.
- Naisbitt, J. (1984) Megatrends. Warner.
- Palloff, R. & Pratt, K. (1999). Building Learning Communities in Cyberspace: Effective Strategies for the Online Classroom. Jossey-Bass.
- Papert, S. (1980). Mindstorms: Children, computers & powerful ideas. Basic Books, NY.
- Pariser, E. (2012). The Filter Bubble: How the New Personalized Web Is Changing What We Read and How We Think. Penguin Books.
- Postman, N. (1985). Amusing Ourselves to Death: Public Discourse in the Age of Show Business. Viking-Penguin Inc.

- Postman, Neil. (1992). Technopoly. Vintage Books.
- Postman, Neil. The End of Education: Redefining the Value of School.
- Rheingold, H. (2003). Smart Mobs: The Next Social Revolution. Basic Books.
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- Rheingold, H. (1991). Virtual reality. Simon & Schuster.
- Rheingold, H. (1993). *The Virtual Community: Homesteading on the Electronic Frontier*. Addison-Wesley Publ. Co.
- Rifkin, J. (1995). The End of Work. G.P. Putnam's Sons.
- Richardson, W. (2006). *Blogs, Wikis, Podcasts and Other Powerful Web Tools for Classrooms*. Corwin Press, Thousand Oaks, CA
- Rosenberg, M. (2000). *E-Learning: Strategies for Delivering Knowledge in the Digital Age*. McGraw-Hill
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- Toffler, Alvin. (1981). The Third Wave. Bantam Books: NY
- Turkle, S. (1995). Life on the Screen. Touchstone, NY.
- Warlick, D. (2005). Raw Materials for the Mind: A Teacher's Guide to Digital Literacy. Lulu.com.
- Weizenbaum, J. (1984). Computer Power and Human Reason: From Judgment to Calculation. Penguin Books.

Wheeler, Thomas H. (2002) Phototruth or Photofiction: Ethics and Media Imagery in the Digital Age. Lawrence Erlbaum Associates: Mahwah, NJ