

School of Communications, University of Hawaii at Manoa
COM633: Information and Communication Technologies
Fall 2014
Course Syllabus

Course Information

Meetings: Wednesday, 12:00-2:30pm, Saunders 242

Instructor: Wayne Buente

Office hours: Mondays, 9-11am or by appointment

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Course description:

The objective of this course is to help you think critically and constructively about information and communication technologies (ICTs) and its relationship to society at large. More specifically, we will examine ICTs from a **sociotechnical perspective**. This perspective provides us with an intellectual tool that acknowledges that technology is embedded in a complex set of other technologies, physical surroundings, people, procedures, etc. that together make up the socio-technical system.

We will explore the ways in which a wide range of academics, activists and policy-makers talk about the nature and uses of information and communication technologies (ICTs) in a number of settings. We will focus on developing tools to critique these perspectives and propose alternatives. The first part of the course will examine a series of concepts and analytical devices to make sense of the empirical case studies and related research that will comprise the second part of the course. In addition, we will examine the development of computerization movements. Computerization movements are “a type of movement that focuses on computer-based systems as the core technologies, which their advocates claim will be instruments to bring about a new social order” (Elliott and Kraemer, 2008, p. 3). The knowledge and insights developed in this seminar will help you throughout your professional, personal, and civic lives.

By the end of the semester, you will be able to:

- Analyze the complex relationships among ICTs, people, and institutions in any social setting.
- Identify and critique popular discourse regarding IT.
- Apply analytical tools learned in this class to solve a variety of practical challenges involving ICTs.

In addition, this course directly addresses the following student learning outcomes (SLOs) for the Communication MA Program:

SL01. Demonstrate subject mastery in areas of communication relevant to personal research interests.

SLOS2. Identify research questions on a contemporary issue in communication, and perform a critical, written analysis of the relevant literature.

Readings:

Readings will be provided through Laulima. We will read a few chapters from the following titles.

Elliott, M. S., & Kraemer, K. L. (Eds.). (2008). *Computerization movements and technology diffusion: From mainframes to ubiquitous computing*. Medford, N.J.: Information Today.

Mansell, R., Avgerou, C., Quah, D., & Silverstone, R. (Eds.). (2007). *The Oxford handbook of information and communication technologies*. Oxford ; New York: Oxford University Press.

Course assignments:

Readings will typically be assigned for each class period and the latest information about readings will be listed in Laulima. Please come prepared. Class discussions are important especially for small class sizes. Your grade will be based upon the following:

Critical summaries of reading (4 total)	15%
Review of professional sources	15%
Midterm	20%
Final presentation	10%
Final project Paper	30%
Class Participation	10%

Evaluation:

The grading criteria are taken from Appendix C in Enerson, D. M., Johnson, R. N., Milner, S., & Plank, K. M. (1997). *The Penn State Teacher II*. University Park, PA: Center for Excellence in Teaching and Learning.

Retrieved August 22, 2011, from <http://www.schreyer institute.psu.edu/pdf/PennStateTeacherII.pdf>

Grading Criteria

These grading standards establish four major criteria for evaluation at each grade level: rhetorical situation, reasoning and content, organization and expression. Since papers may have some characteristics of "B" and others of "C," the final grade depends on the weight the instructor gives to each criterion. A paper grossly inadequate in one area may still receive a very low grade even if it successfully meets the other criteria. A brief summary of the grading criteria is provided below. Please consult the grading criteria in Appendix C for a more detailed explanation.

The "A" Paper: An "A" paper is clear and consistent and the content is appropriate for the assignment. It also demonstrates clear organization and expression.

The "B" Paper: The "B" paper shows an awareness of the audience and purpose. Its content is reasonably well developed with adequate evidence. The organization is clear and expression is competent.

The "C" Paper: The "C" paper has a clear purpose but lacks originality in topic selection. The content is adequately developed and supported with valid reasoning. Organization is clear with mechanical but appropriate transitions. The paper also demonstrates mastery of most conventions of edited English.

The "D" Paper: The "D" paper has a unclear purpose and an inappropriate topic for its intended audience. The content is inadequately developed and evidence is insufficient. The paper also shows flawed reasoning. Organization is deficient and the paper exhibits poor grammar.

The "F" Paper: The "F" paper has no clear purpose or remotely appropriate for its intended audience. The content is not developed nor adequately supported. The paper has no organization and serious errors with English comprehension.

Attendance:

I expect you to be at all class sessions. Excessive absences that are not excused will lower your final grade.

Course Schedule (Please note that this is a tentative reading list):**Week 1 (08/27): Introduction**

Introduction to the course and expectations

Week 2 (09/03): Technological Determinism and other discourses on ICTs

Chapter 2

Nye, D. E. (2006). *Technology matters: Questions to live with*. Cambridge, Mass.: MIT Press.

Joy, B. (2001). Why the future doesn't need us. In P. J. Denning (Ed.), *The invisible future: The seamless integration of technology into everyday life* (pp. 47-75). New York, NY: McGraw Hill.

Langdon, W. (1980). Do artifacts have politics? *Daedalus*, 109(1), 121-136.

Week 3 (09/10): Technological Determinism

Introduction

Beniger, J. R. (1986). *The control revolution: Technological and economic origins of the information society*. Cambridge, Mass.: Harvard University Press.

Chapters 10 and 11

Mumford, L. (1967). *The myth of the machine: Technics and human development*. London: Secker & Warburg.

Ellul, J. (1964). *The technological society* (1st American ed.). New York,: Knopf.

Review of Professional Sources assignment available in Laulima

Week 4 (09/17): Social Shaping and SCOT approaches

Pinch, T. J., & Bijker, W. E. (1989). The social construction of facts and artifacts: Or how the sociology of science and the sociology of technology might benefit each other. In W. E. Bijker, T. P. Hughes & T. J. Pinch (Eds.), *The social construction of technological systems: New directions in the sociology and history of technology* (1st MIT Press paperback ed., pp. 17-50). Cambridge, Mass.: MIT Press.

Cowan, R. S. (1999). The industrial revolution in the home. In D. A. MacKenzie & J. Wajcman (Eds.), *The social shaping of technology* (2nd ed., pp. 281-300). Milton Keynes, Eng. ; Philadelphia, Pa.: Open University Press.

Fallows, J. (1999). The American army and the M-16 rifle. In D. A. MacKenzie & J. Wajcman (Eds.), *The social shaping of technology* (2nd ed., pp. 382-394). Milton Keynes, Eng. ; Philadelphia, Pa.: Open University Press.

MacKenzie, D. (1997). The social shaping of technology. In M. R. Smith, G. Clancey & T. Paterson (Eds.), *Major problems in the history of American technology* (pp. 13-15). Boston, MA: Houghton Mifflin.

Week 5 (09/24): Computerization Movements, Social Informatics, and Sociotechnical perspectives

Class presentations for Review of Professional Sources

Brown, J. S., & Duguid, P. (2001). Don't count society out: A reply to Bill Joy. In P. J. Denning (Ed.), *The invisible future: The seamless integration of technology into everyday life* (pp. 117-144). New York, NY: McGraw Hill.

Kling, R. (1994). Reading "all about" computerization: How genre conventions shape nonfiction social analysis. *The Information Society*, 10(3), 147-172. doi: 10.1080/01972243.1994.9960166

Week 6 (10/01): Social Informatics and Sociotechnical Concerns

Class presentations for Review of Professional Sources

Kling, R., Rosenbaum, H., & Sawyer, S. (2005). *Understanding and communicating social informatics: A framework for studying and teaching the human contexts of information and communication technologies*. Medford, N.J.:

Information Today, Inc.

Lamb, R., & Sawyer, S. (2005). On extending social informatics from a rich legacy of networks and conceptual resources. *Information Technology & People*, 18(1), 9-20.

Sreekumar, T. T. (2011). Mobile Phones and the Cultural Ecology of Fishing in Kerala, India. *The Information Society*, 27(3), 172-180. doi: 10.1080/01972243.2011.566756

Week 7 (10/08): Native American and Indigenous Cultures

Sandvig, C. (2011). Connection at Ewiiapaayp Mountain: Indigenous Internet infrastructure. In L. Nakamura & P. Chow-White (Eds.), *Race after the Internet* (pp. 168-200). New York, NY: Routledge.

Christen, K., A. (2012). Does Information Really Want to be Free? Indigenous Knowledge Systems and the Question of Openness. *International Journal of Communication*, 6, 2870-2893.

Dyson, L. (2011). Indigenous peoples on the Internet. In M. Consalvo & C. Ess (Eds.), *The handbook of internet studies* (pp. 251-269). Malden, MA: Wiley-Blackwell.

Week 8 (10/15): Law, Order, and ICTs

Manning, P. K. (1996). Information Technology in the Police Context: The "Sailor" Phone. *Information Systems Research*, 7(1), 52-62. doi: doi:10.1287/isre.7.1.52

Musto, J. L., & boyd, d. (2014). The Trafficking-Technology Nexus. *Social Politics: International Studies in Gender, State & Society*, 21(3), 461-483. doi: 10.1093/sp/jxu018

Sanders, C. B. (2014). Need to know vs. need to share: Information technology and the intersecting work of police, fire and paramedics. *Information, Communication & Society*, 17(4), 463-475. doi: 10.1080/1369118X.2014.891632

Week 9 (10/22): Algorithms and Big Data

Crawford, K., & Gillespie, T. (2014). What is a flag for? Social media reporting tools and the vocabulary of complaint. *New Media & Society*. doi: 10.1177/1461444814543163

Gillespie, T. (2014). The relevance of algorithms. In T. Gillespie, P. J. Boczkowski & K. A. Foot (Eds.), *Media technologies: Essays on communication, materiality, and society* (pp. 167-193). Cambridge, Massachusetts: The MIT Press.

boyd, d., & Crawford, K. (2012). Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon. *Information, Communication & Society*, 15(5), 662-679. doi: 10.1080/1369118X.2012.678878.

Week 10 (10/29): Rural Life and ICTs

Ei Chew, H., LaRose, R., Steinfield, C., & Velasquez, A. (2011). The use of online social networking by rural youth and its effects on community attachment. *Information, Communication & Society*, 14(5), 726-747.

Gilbert, E., Karahalios, K., & Sandvig, C. (2010). The network in the garden: Designing social media for rural life. *American Behavioral Scientist*, 53(9), 1367-1388.

Goh, D. (2012). Who we are and what we want: A feminist standpoint approach to defining effective ICT use for West Virginian women. *Information, Communication & Society*, 1-23.

Week 11 (11/05): No class

Week 12 (11/12): Wikipedia as Sociotechnical System

Geiger, R. S. (2014). Bots, bespoke, code and the materiality of software platforms. *Information, Communication &*

Society, 17(3), 342-356. doi: 10.1080/1369118X.2013.873069.

Niederer, S., & van Dijck, J. (2010). Wisdom of the crowd or technicity of content? Wikipedia as a sociotechnical system. *New Media & Society*, 12(8), 1368-1387. doi: 10.1177/1461444810365297 .

Chapter 7 in

Dijck, J. v. (2013). *The culture of connectivity: A critical history of social media*. Oxford ; New York: Oxford University Press.

Week 13 (11/19): Sociotechnical research among different groups

Hargittai, E., Neuman, W. R., & Curry, O. (2012). Taming the information tide: Perceptions of information overload in the American home. *The Information Society*, 28(3), 161-173.

McDonald, T. (2014). Affecting relations: Domesticating the internet in a south-western Chinese town. *Information, Communication & Society*, 18(1), 17-31. doi: 10.1080/1369118X.2014.924981.

McMillan, S. J., Avery, E. J., & Macias, W. (2008). From have nots to watch dogs: Understanding internet health communication behaviors of online senior citizens. *Information, Communication & Society*, 11(5), 675-697. doi: 10.1080/13691180802126745.

Week 14 (11/26): Thanksgiving

Week 15 (12/03): TBD

Gehl, R. W. (2014). Power/freedom on the dark web: A digital ethnography of the Dark Web Social Network. *New Media & Society*. doi: 10.1177/1461444814554900.

van Dijck, J. (2010). Search engines and the production of academic knowledge. *International Journal of Cultural Studies*, 13(6), 574-592. doi: 10.1177/1367877910376582.

Week 16 (12/10): Final Paper Presentations