**IS 735 - Computer Mediated Communication Systems: Social Media**  
*Prof. Roxanne Hiltz for Fall 2011*  
*Draft July 23 2011*

Course Description:
Prerequisite: a graduate course in statistics (e.g., Math661) or research methods. Design and social impacts of computer-based systems for human communication, including electronic mail, Group Support Systems and Computer-Supported Cooperative Work (CSCW), with a special emphasis on the social computing applications of “Web 2.0” such as social networking systems and virtual worlds. Course readings are articles in research journals. Completion of a pilot research study or other individual term project is required.

Course format: seminar style. Guided independent study with online discussions, some face to face meetings, required online participation, exam and project.

Office hours:
Roxanne: on campus, by appointment; usually available on days of IS seminars. If you need to see me on campus, please email me and I will let you know when I will be on campus next.

Online, via Skype or by phone: by appointment

The readings may be updated as new publications appear.

The purpose of this seminar is to:
1. Provide an overview of the history and state of the art of research on computer-mediated communication.
2. Understand the nature of “Web 2.0” social computing applications and of social, design, and research issues related to these relatively new applications of computer-mediated communication.
3. Prepare participants to do research in this area, and enable current researchers to exchange ideas and information.

The pre-requisite is any basic graduate-level research methods course or graduate statistics and probability course with a grade of B or higher; this Is necessary to be able to understand the research articles. Intended primarily for Ph.D. students, but masters students planning a project or thesis in this area may also wish to participate.
There will be recorded lectures that are optional; some of them are out of date and you may decide that you don’t want to watch them after giving them a try. We will be doing our work primarily online on Moodle, but we may try a week or two on other social media platforms, e.g. a Facebook group space. There will be occasional face to face meetings on campus that could be participated in remotely by phoning in, or synchronous online sessions, including one or more sessions on Second Life; day and time to be chosen based on schedules of participants.

This is a draft plan, subject to revision as opportunities and the interests of the group evolve. Nobody is expected to read all of these sources. Seminar members will share the work of locating, reading, summarizing and critiquing the more important articles for one another. Each student will be responsible for summarizing/critiquing two articles per week, on the average. For those subtopics of less interest, you may do only the “required” articles; for those more closely related to your future research plans, you may read everything listed here, and more.

GRADING
30% class participation, 30% exam, 40% final project

**Systems tour: part of class participation**
Each student will choose a “WEB 2.0” application; create an online presentation and report which gives a “tour” of the main features of the system(s); what it is used for and by whom; possible research issues that are suggested; and questions for discussion. We will try to have a face to face meeting for these system tours and discussions about week 4 of the course.

**Term Project:** Research Proposal and pilot study; 40%.
This might serve as a draft of the first part of a grant proposal, dissertation proposal or a master’s project, on the topic related to CMC on which you are most interested in doing research.
As a term paper, each student should present an original research proposal in the area of CMC/social media. This paper will consist of three parts and should be written in the style of a conference paper or journal article: (1) a review of the relevant literature in CMCS from where the research question originated along with a set hypotheses or research questions (at least 10 pages); (2) a proposed specific research method (experiment or survey) or qualitative observations) to collect data and test the hypotheses; and (3) ideally, a pilot study gathering data from a small number of subjects, with reporting of results. You may work alone
or in teams of two. If you are working alone you probably will not include the small scale pilot study.

You are expected to post a summary or draft of your proposed project for approval and comments, by the last week of the class; and to post the project you turn in, when you turn it in (by mid-March, if you take an Incomplete; to get a grade other than incomplete it must be in by December 15). Typically, this will take a topic from ONE of the units and expand on it; length approximately 25-40 pages, double spaced, 12 point font (the length of a paper; you are encouraged to think of writing a paper that will be able to be submitted to a conference such as AMCIS or ISCRAM or HICSS.)

Exam 30%.
At about the 12th to 14th weeks of the semester, the students will participate in an online collaborative examination to demonstrate their knowledge of the assigned readings and research challenges in this area. Participation will be in the form of individuals each contributing possible questions, answering questions selected for them online, and then doing initial grading of responses to their questions.

Participation, 30%. Students are required to engage in online summaries and discussions of course materials, each week. This will be divided into the two halves of the course. (eg, participation first half, 15%, participation second half, 15%).

DETAILED BIBLIOGRAPHY AND SYLLABUS FOR IS 735

The following is an overview of the topics and the corresponding readings for each week. These readings include a selection of articles published recently in the top journals in CMC and IS, and some seminal (classic, oft cited) papers on each topic. Many of these articles will be made available for the students at the beginning of the semester in an online collection; others will be located by students who will contribute the URLs to our online conference.

Abbreviations
CACM= Communications of the ACM
MISQ= MIS Quarterly
CSCW= Proceedings of the Conference on Computer Supported Cooperative Work
ISCRAM: Proceedings of the conference on Information Systems for crisis Response and Management

HICSS= proceedings of the Hawaii International Conference on ‘System Sciences.

JCMC: Journal of Computer Mediated Communication (online) http://www.ascusc.org/jcmc/

Journal of Asynchronous Learning Networks (JALN) (www.sloan-C.org)

Text none

**READINGS and reference list:** An Asterisk means they are “required” and there may be questions specifically on them included in the exam. A double asterisk means very important...
AN XX means “alumnus of this course”

**Weeks 1 and 2**

Literature Reviews, Theoretical Frameworks, General Overviews

**Lectures:** Lecture 1, Introduction/ History and Lecture 2, theories


Malone and Crowston, "What is coordination theory and how can it help design “cooperative work systems?” CSCW ’90, pp. 371-380.

Weeks 3 to 5: Design Choices and Technology: Historical Overview and Web 2.0 applications

A. Historical structures and issues


Others?

B. Web 2.0

*For an online, continuously updated bibliography, see danah boyd’s site:
http://www.danah.org/researchBibs/twitter.php
It is required that you look at this and remember where it is in case you want to retrieve some of the sources linked.

*Beer, D. Social network(ing) sites... revisiting the story so far: A response to dana boyd & Nicole Ellison. JCMC, 13 ( 2008).


Robber and Cooper, Capturing Knowledge via an “Intrapedia”: A Case Study, proceedings HICSS 2011.


*Steinkuehler, C. and Williams, D. Where everybody knows your (screen) name: Online games as “third places”. JCMC. 11 (4) 2006.


Dwyer, C. (XX) and Hiltz, S.R. Designing Privacy into online communities. Proceedings of Internet Research 9.0, Copenhagen, Denmark October 15th to 18th 2008.


Weeks 6 and 7 and 8 - Social Impacts Studies (Theories, Results and Methods)

Lectures: L5 - Studies of the Social Dynamics of CMC
L6 Social Impacts of CMC
Newer Lecture: recent studies

Methods-- JCMC Vol. 3 #1 June 1997 Volume 3, No. 1: "Studying the Net" including:


Paccagnella et. al., Getting the Seats of Your Pants Dirty: A Methodology for Ethnographic Research on Virtual Communities


Gopal, Abhijit and Pushkala Prasad, Understanding GDSS in symbolic context: Shifting the focus from technology to interaction. MISQ, 24, 3 (Sept 2000), 509- 546.


Herring, S. Interactional Coherence in CMC, JCMC, 4,4 (June 1999)


Rintel, E.S., Mulholland, J. and Pittam. J. First Things First: Internet Relay Chat Openings. JCMC April 2001
Sproull & Kiesler, A two-Level perspective on Electronic Mail in Organizations, J. of Organizational Computing, 1, 2 1991, 125-134 (very short form of the above).
Sussman, S.W and Sproull, L. Straight talk: Delivering bad news through electronic communication. ISR, 10, 2 (June 1999), 150-166.
Yoo, Y and Alavi, M. Media and group cohesion: Relative influences on social presence, task participation, and group consensus. MISQ, Sept 2001.


Privacy Issues:


**Week 9 . Group Decision Support**

("old" Lectures: 7- Experimental Studies of “same time” GSS (Roxanne Hiltz); 8 and 9- NJIT experiments on Asynch GSS L10 An overview of studies of Group Support Systems)

A. General


*Dennis, A.R. Information exchange and use in group decision making: you can lead a group to information but you can’t make it think. MIS Quarterly, 20, 4 1996, 433-455.


DeSanctis and Poole, Capturing the complexity in advanced technology use: Adaptive structuration theory, Organization Science, June 1992.


**NJIT Studies of GDSS**


**Minnesota Studies of GDSS**


Watson, R.T., DeSanctis and Poole 1987. Using GDSS to facilitate group consensus: some intended and unintended consequences. MIS Quarterly, 12.


(note: Zigurs is now at U. of Nebraska, chairing dept there)


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**Arizona (profs and former students) Studies of GDSS**


(http://www.cmi.arizona.edu/personal/bbriggs/downloads/thinklets.doc)


Dennis, A. R. 1996. Information exchange and use in group decision making: You can lead a group to information, but you can’t make it think. MIS Quarterly, December, 433-457.


**Week 10 Virtual Teams and Virtual communities**  
**Lecture: Virtual teams**

Bos, Nathan et al., *Collocation ‘Collocation Blindness’ in Partially Distributed Groups: Is There a Downside to Being Collocated?* CHI 2006 Proceedings, April 22-27, 2006


Gillam, Catherine and Charles Oppenheim *Review Article: Reviewing the impact of virtual teams in the information age* Journal of Information Science 32 (2) pp. 160-175 2006


*Hinds & Mortensen "Understanding Conflict in Geographically Distributed Teams: The Moderating Effects of Shared Identity, Shared Context, and Spontaneous Communication" 2005


Piccoli, G. and Ives, B. Trust And The Unintended Effects Of Behavior Control In Virtual Teams, MISQ 27 (2003),3,pp. 365-395


Weeks 11 + 12: Social Media and Emergency Management


blog. The Role of Facebook in Disaster Response
Posted on May 22, 2011 by Patrick Meier


Chew C, and Eysenbach G. (2010). Pandemics in the Age of Twitter: Content Analysis of Tweets during the 2009 H1N1 Outbreak. Plos One, 5 (11), e14118.) (available on boyd’s site)


Perotti, V. and Hair, N. *User Experience in Online Social Networks: A Qualitative Analysis of Key Activities and Associated Features*, proceedings, HICSS 2011.


**NOTE: Weeks 12-14: collaborative Exam (administered online; for which students make up the questions and do initial feedback/ grading on the questions they make up)**

Week 12, you will post three questions before Friday – to cover topics through week 12.

Week 13, you will answer two questions assigned to you

Week 14, you will do initial grading of the answers to the questions you made up

Then by December 10 or so I will review the grading and post your final exam grade.

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**Week 13  Educational Applications- Asynchronous Learning Networks**

**Lecture:** 11 ALN lecture (Roxanne Hiltz) Recorded 1/15/2007  


Ocker, R., Dana Kracaw, Starr Roxanne Hiltz, and Mary Beth Rosson, , Enhancing learning experiences in Partially Distributed Teams: Training students to work effectively across distances, Volume 1 Number 1 of ACM Transactions on Computing Education, March 2009.


WEEK -14  Research Frontier/ Pervasive CMC/ Location aware and extremely mobile systems/ new applications

Lectures: 13 Evolving/ Future CMC systems:
Part 1 Online games and virtual reality environments
  Mobile (location related) Social Networking Systems: Dodgeball,
Part 2- Smart campus
Recorded April 2009)
Shneiderman, Ben, Technology-Mediated Social Participation: The Next 25 Years of HCI Challenges. Draft paper for HCI 2011; will be posted.


Sara Green-Hamann, Kristen Campbell Eichhorn and John C. Sherblom


