

Instructor Information

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Course Description

This survey course examines the theory, design, and evaluation of systems that mediate human interaction. These range from small group conferencing tools to enterprise-wide workflow management systems to Internet-scale social media sites. These rely upon enabling technologies as commonplace as discussion boards and as exotic as immersive virtual worlds. The course takes a socio-technical perspective, exploring the complex co-evolution of both user and system behavior. Students will learn the underlying theories of computer-supported cooperative work (CSCW), best practices in the design of Groupware, and the methods to evaluate their utility in real-world settings.

Course Format

This is a seminar style class. Students are expected to complete all background reading before class, to take an active part in discussions, ask questions of one another, and offer their thoughts on topics being discussed. You are learning and critically engaging with the work together.

Course Objectives

1. Students will become familiar with key works and people within CSCW and related disciplines that have shaped and influenced the field.
2. Students will become acquainted with the various conferences and journals that serve as key resources within the CSCW community.
3. Students will learn to identify articles on a specific topic within CSCW, and to read these articles to identify key results (practical and theoretical), limitations (stated and unstated), and future research directions (stated and unstated).
4. Students will learn to identify and critique theories and assumptions that serve as the foundation for research within the field of CSCW, and to relate these theories and assumptions to the design of interactions between people through technology.

Texts

There is no textbook for this course. Readings will be drawn from the contemporary research literature. Articles will be available for download in PDF format.

Course Policies

Communication

Students are encouraged to actively engage with the professor. They are primarily directed to do so within the course Blackboard site so that all students in the class can benefit from the interaction. Therefore, if you have a question that could pertain to other students as well, ask it on the Discussion Board under ‘**Questions and Comments**’ and I or another student will answer it (p.s. I look favorably on those who answer other’s questions). However, there are situations where a private interaction is preferred. In this case, please contact the instructor via e-mail. **All questions will be answered within three business days.**

Professional Conduct

It is expected that all students will be active in all course activities throughout the semester. That said, I fully understand that the demands of work and family life occasionally impact your ability to do so. You are welcome to work ahead to afford additional flexibility in your schedule. If you have an emergency or anticipate an extended absence please inform the instructor **well in advance** and reasonable accommodations will be made.

Academic Conduct

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty and integrity. Acts of academic misconduct, as defined below, will result in disciplinary action that may include failure of the course, suspension, or dismissal. (Please consult the UMBC Student Handbook for the full policy.)

Cheating: Knowingly using or attempting to use unauthorized material, information, or study aids in any academic exercise.

Fabrication: Intentional and unauthorized falsification or invention of any information or citation in an academic exercise.

Facilitation: Knowingly helping or attempting to help another commit an act of academic dishonesty.

Plagiarism: Knowingly representing the words or ideas of another as one's own in any academic exercise, including works of art and computer-generated information/images.

Student Accommodations

UMBC is committed to eliminating discriminatory obstacles that disadvantage students based on disability. Student Support Services (http://www.umbc.edu/sss/html/sss_disab.htm) is the UMBC department designated to receive and maintain confidential files of disability-related documentation, certify eligibility for services, determine reasonable accommodations, develop with each student plans for the provision of such accommodations, and serve as a liaison between faculty members and students regarding disability-related issues. If you have a disability and want to request accommodations, contact SSS in the Math/Psych Bldg., room 213 or at 410-455-2459. SSS will require you to provide appropriate documentation of disability. If you require accommodations for this class, make an appointment to meet with me to discuss your SSS-approved accommodations.

Course Activities

IS/HCC 727 is an interactive, survey course where knowledge is co-constructed through conversation and collaboration. All required resources are available via the course Blackboard site and will be highlighted during the first week of class.

Readings

Each week you will read 2-3 topical research articles, which will be available for download in PDF from the course site. It is expected that all students will be familiar with all readings for that week. When you are reading, try to engage with the text by asking yourselves questions like: Why was this person writing about this? What is the impact of this work? Why is this paper still relevant? Could this work have been done differently? Where do I see the impact of this work in technology around me? (This is not an exhaustive list of questions to ask, but simply a starting point for how to *engage* with what you are reading.)

Blog & Exercises

Each student is expected to maintain a blog within the course site, which they will update regularly throughout the semester. The blog will be the primary place for personal reflection on each week's readings. By **Monday at 11:59pm ET**, students should post their reactions to the readings – what they understood to be insights in the readings (i.e. the questions you should be thinking about when reading that I listed above), what they didn't understand, and what they like/didn't like. Students are encouraged to follow the blogs of their classmates, but are not required to comment.

In-class Discussions

Each week in class we discuss the topic based on the readings. This is the heart of the course and all students are expected to meaningfully contribute each week – raising new issues, leading conversation, and responding to each other. We will split the time together into two parts. The first part will be small group *collaborations* – come

together in groups of four and discuss the readings for an hour. These discussions are to build off of your blog entries – trying to agree on what the insights were and answer each other’s questions. The second part will be a full class face-to-face discussion.

Distillation

Each week dedicated student archivists will distill the highlights of the discussion into a brief summary to post on the course wiki. Every student will do this once. As there will be 2-3 students assigned to each week that means this is a *collaborative* wiki assignment. Distillations are due by the following **Monday at 11:59pm ET**.

Demonstration Project

To bring personal relevance to the abstract material from this course, students will undertake a modest research project of personal interest. These will be done in teams of two. These are projects meant to demonstrate the students’ mastery of the course material and ability to apply it to real-world problems. The topic is to be selected in consultation with the instructor and scoped appropriately. Projects will align with one of the following approaches:

- *Study & Design*: Conduct a thorough examination of a current, collaborative or social process. Construct a conceptual design of new or improved IT mediation.
- OR -
- *Pilot & Evaluate*: Deploy a collaboration/social support technology for at least two weeks. Study its impact on collaboration/sociality.

A brief *project proposal* is due **Monday, Feb. 16 at 11:59pm**. A *work-in-progress booster* (blog posting due **Monday March 23 at 11:59pm**) will be showcased right after Spring Break. *Peer evaluations* of the WiPs are due **Monday March 30 at 11:59pm**. Students are encouraged to incorporate feedback from this evaluation in preparing their *final project portfolio* (due **Monday May 18 at 11:59pm**).

For this project, the team must utilize *at least three forms of computer mediation* in order to complete the project. Examples would be email or chat to discuss the project, networked document editor to write the papers or study materials, a shared drawing program to diagram out the new system, or even a shared file system to store materials. At the end of the semester there will be a final questionnaire deployed where you will describe how you used these systems and how they helped or hindered your work.

Grading Policies

Grading Standards

The University’s Graduate Catalog states that grades of “A”, “B”, and “C” are passing and grades of “D” and “F” indicate failure. There is specifically no mention of any numerical scores associated with these letter grades. Consequently, there are no pre-defined numerical boundaries that determine final letter grades. These boundaries can only be defined at the end of the semester after all scores have been earned. At that point, boundaries for final letter grades can be defined such that they conform to the University’s and IS’s official guidelines. This means that it is not appropriate to assume that a given numerical score corresponds to a particular letter grade. It is also important to understand that final letter grades reflect academic **achievement** and not effort.

Grading Details

A student's course grade will depend upon their performance on routine exercises (captured in their blog), class discussion, their wiki distillation, and a final project (including peer assessment). Progress reports in all areas will be provided at regular intervals during the semester and always will be available via the Blackboard gradebook. The breakdown follows:

Assignment	%
In-class Discussion	30
Reflection Blog	20
Distillation on Wiki	10
Project	40
Proposal	5
Work-in-progress booster	10
Peer assessment of others' papers	5
Final Project	20

Grading Scheme

The proposal and work-in-progress booster will be graded on a done/not done basis. All other activities will be evaluated along the following four-point scale:

Assignment	Level/Description and Associated Score			
	1	2	3	4
Discussion Participation	Doesn't discuss.	Repeats what is in the paper or what others have said.	Adds ideas without critical examination or justification.	Adds ideas in a motivated and analytic way. Builds on other people's ideas. Synthesizes world perspectives from earlier in the course.
Reflection Blogs	Doesn't do.	Does in a rote fashion.	Goes beyond the rote to frame the situation.	Goes beyond the framing to new thoughts.
Distillation	Doesn't distill.	Distills most of discussion but makes mistakes about key concepts.	Distills in rote fashion without distinguishing important and unimportant, new and old concepts.	Summarizes and critically synthesizes the thoughts.
Final Project	Doesn't submit report.	Fulfills in a rote fashion.	Does a very complete job of gathering data and presenting it.	Presents data in such a way as to make an argument and justify either change or a sophisticated perspective.
Peer Assessment	Doesn't complete assessment.	Simply summarizes paper or provides only a few pieces of feedback.	Summarizes contribution, provides assessment of positive and negative attributes and suggests changes.	Summarizes contribution, provides assessment of positive and negative attributes and suggests changes. Integrates content/discussions from course into feedback.

NOTE: I value the **quality** of the contribution over mere frequency of interaction.

Late Work

All deadlines are **Monday night at 11:59pm (ET)**. Late submission that have not been arranged beforehand will be docked 5% for every 24 hours it is late.

	Date	Topic	Required Readings
	1 January 27	Introduction & Syllabus	
	2 February 3	Why we study CSCW	Grudin, J. (1994). Groupware and social dynamics: Eight challenges for developers. <i>Communications of the ACM</i> , 37(1), 92-105. Ackerman, M. (2000). The Intellectual Challenge of CSCW: The Gap between Social Requirements and Technical Feasibility. <i>Human-Computer Interaction</i> , 15(2), 179-203.
	3 February 10	Articulation Work & Awareness	Schmidt, K. & Bannon, L. (1992). Taking CSCW Seriously: Supporting Articulation Work. <i>CSCW</i> , 1,7-40. Dourish, P. & Bellotti, V. (1992). Awareness and coordination in shared workspaces. <i>CSCW</i> , pp. 107-114. Mackay, W.E. (2000). Is Paper Safer? The Role of Paper Flight Strips in AirTraffic Control. <i>ACM Transactions on Computer-Human Interaction</i> , 6 (4), pp. 311-340.
THEORIES	4 February 17	Place & Space	Project Proposal due Monday Feb. 16 at 11:59pm Hollan, J. & Stornetta, S. (1992) Beyond Being There. <i>CHI</i> , pp. 119-126. Olson, G. M., & Olson, J. S. (2000). Distance matters. <i>Human-computer interaction</i> , 15(2), 139-178. Harrison, S. & Dourish, P. (1996). Re-place-ing space: the roles of place and space in collaborative systems. <i>CSCW</i> , pp. 67-76.
	5 February 24	Sociality	Erickson, T. & Kellogg, W. (2000) Social Translucence: An approach to designing systems that support social processes. <i>ACM Transactions on Computer-Human Interaction</i> , 7(1), 59-83. Constant, D., Sproull, L., & Kiesler, S. (1997). <i>The Kindness of Strangers: On the usefulness of electronic weak ties for technical advice</i> . In S. Kiesler (Ed.), <i>Culture of the Internet</i> . Mahwah, NJ: Lawrence Erlbaum Associates.
	6 March 3	Organizations	Orlikowski, W.J. (1992). Learning from Notes: organizational issues in groupware implementation. <i>CSCW</i> , pp. 362-369. Ackerman, M.S. & Halverson, C. (1998). Considering an organization's memory. <i>CSCW</i> , pp. 39-48. Bradner, E., Kellogg, W. A., & Erickson, T. (1999). The adoption and use of 'Babble': A field study of chat in the workplace. <i>ECSCW</i> , pp. 139-158.
PEOPLE	7 March 10	Online Communities	Dabbish, L., Stuart, C., Tsay, J., & Herbsleb, J. (2012). Social coding in GitHub: transparency and collaboration in an open software repository. <i>CSCW</i> , pp. 1277-1286. Farzan, R., Dabbish, L. A., Kraut, R. E., & Postmes, T. (2011). Increasing commitment to online communities by designing for social presence. <i>CSCW</i> , pp. 321-330. Ducheneaut, N., & Moore, R. J. (2004). The social side of gaming: a study of interaction patterns in a massively multiplayer online game. <i>CSCW</i> , pp. 360-369.
	March 17	Spring Break	
	8 March 24	Families/Youth	Work-in-Progress Booster due Monday March 23 at 11:59pm Ames, M. G., Go, J., Kaye, J. J., & Spasojevic, M. (2010). Making love in the network closet: the benefits and work of family videochat. <i>CSCW</i> , pp. 145-154. Lindley, S., Harper, R., & Sellen, A. (2010). Designing a technological playground: a field study of the emergence of play in household messaging. <i>CHI</i> , pp. 2351-2360. Grinter, R., Palen, L. & Eldridge, M. (2006). Chatting with teenagers: Considering the place of chat technologies in teen life. <i>ACM Transactions on Computer-Human Interaction</i> , 13(4), 423-447.

Peer Evaluation of WiPs due Monday March 30 at 11:59pm

TECHNOLOGIES	9	March 31	User-led Production Environments [Wikis, Blogs, Second Life]	Kriplean, T., Beschastnikh, I., & McDonald, D. W. (2008). Articulations of wikiwork: uncovering valued work in wikipedia through barnstars. <i>CSCW</i> , pp. 47-56. Nardi, B. A., Schiano, D. J., Gumbrecht, M., & Swartz, L. (2004). Why we blog. <i>Communications of the ACM</i> , 47(12), 41-46. Shami, N. S., Erickson, T., & Kellogg, W. A. (2011). Common Ground and small group interaction in large virtual world gatherings. <i>ECSCW</i> , pp. 393-404.
	10	April 7	Crowdsourcing/ Microtasking [Amazon Turk]	Kittur, A., Nickerson, J. V., Bernstein, M., Gerber, E., Shaw, A., Zimmerman, J., ... & Horton, J. (2013). The future of crowd work. <i>CSCW</i> , pp. 1301-1318. Dow, S., Kulkarni, A., Klemmer, S., & Hartmann, B. (2012). Shepherding the crowd yields better work. <i>CSCW</i> , pp. 1013-1022.
	11	April 14	Twitter, Facebook, WhatsApp, Oh My!	Morris, M. R., Counts, S., Roseway, A., Hoff, A., & Schwarz, J. (2012). Tweeting is believing?: Understanding microblog credibility perceptions. <i>CSCW</i> , pp. 441-450. Burke, M. & Kraut, R. (2013). Using Facebook after losing a job: Differential benefits of strong and weak ties. <i>CSCW</i> , pp. 1419-1430. O'Hara, K. P., Massimi, M., Harper, R., Rubens, S., & Morris, J. (2014, February). Everyday dwelling with WhatsApp. <i>CSCW</i> , pp. 1131-1143.
IMPACT	12	April 21	Scientific Inquiry <i>Guest Lecturer: Alyson Young</i>	Bietz, M.J. & Lee, C.P. (2009). Collaboration in Metagenomics: Sequence Databases and the Organization of Scientific Work. <i>ECSCW</i> . Young, A.L. & Lutters, W. G. (2015). (Re)defining Land Change Science through Synthetic Research Practices. <i>CSCW</i> .
	13	April 28	Health	Reddy, M. C., Dourish, P., & Pratt, W. (2006). Temporality in medical work: Time also matters. <i>CSCW</i> , 15(1), 29-53. Fitzpatrick, G. & Ellingsen, G. (2013). A review of 25 years of CSCW research in healthcare: contributions, challenges and future agendas. <i>CSCW</i> , 22(4-6), 609-665. O'Hara, K., Gonzalez, G., Penney, G., Sellen, A., Corish, R., Mentis, H., ... & Carrell, T. (2014). Interactional Order and Constructed Ways of Seeing with Touchless Imaging Systems in Surgery. <i>CSCW</i> , 23(3), 299-337.
	14	May 5	Global Strife	Starbird, K. & Palen, L. (2012). (How) will the revolution be retweeted?: information diffusion and the 2011 Egyptian uprising. <i>CSCW</i> , pp. 7-16. Monroy-Hernández, A., Kiciman, E., De Choudhury, M., & Counts, S. (2013). The new war correspondents: The rise of civic media curation in urban warfare. <i>CSCW</i> , pp. 1443-1452.
	15	May 12	Ethics in CSCW	Kramer, A.D.I., Guillory, J.E., Hanock, J.T. (2014). Experimental evidence of massive-scale emotional contagion through social networks. <i>PNAS</i> , 111(24), pp. 8788-8790. <ul style="list-style-type: none"> ▪ PNAS Editorial Expression of Concern and Correction [At start of Kramer et al PDF] ▪ http://mediarelations.cornell.edu/2014/06/30/media-statement-on-cornell-universitys-role-in-facebook-emotional-contagion-research/ De Choudhury, M., Counts, S., Horvitz, E. J., & Hoff, A. (2014). Characterizing and predicting postpartum depression from shared Facebook data. <i>CSCW</i> , pp. 626-638.

Final Papers/Projects Due Monday May 18 at 11:59pm