

# ENG6939: Access, Social Justice, and Community Informatics

## Douglas Walls

Fall 2013

### Contact Info

Douglas Walls  
douglas.walls@ucf.edu  
twitter @wallsdouglas  
Office Hours: Friday, 11:30 am or by appointment  
Campus Location: CNH307C

### About

You should come prepared to work with ideas; they do not have to be good ideas yet, at the ready.

#### Course Description

This is a course about listening and making.

In this course, students work on collaborative projects to design innovative human-computer interactions and information aimed at transforming the way people do things in their everyday lives at work, in the home, and in other social settings. Students conduct activity analysis to observe and analyze everyday practices, use object-oriented modeling techniques to represent and plan transformations to those practices, and do UI prototyping to specify implementation plans. I will ask that each team think carefully about how their project will benefit users by changing the social environment they are designing for in a way that works to further democratic social goals and/or facilitate justice and to end violence, oppression, discrimination or other undesirable social dynamics.

“The opposite of poverty is not wealth...In too many places, the opposite of poverty is justice.”  
-Bryan Stevenson

“Welcome to the human network”  
-Cisco Systems Anthem

### Texts

#### Required:

- Arendt, Hannah. *The Origins of Totalitarianism*. New. Harcourt, Brace, Jovanovich, 1973. Print.
- Eubanks, Virginia. *Digital Dead End: Fighting for Social Justice in the Information Age*. The MIT Press, 2011. Print.
- Grabill, Jeffrey T. *Writing Community Change: Designing Technologies for Citizen Action*. Hampton Press, 2007. Print.
- Gurstein, Michael. [What Is Community Informatics \(and Why Does It Matter\)?](#) 2007. Web. 11 Aug. 2012.
- Kaptelinin, Victor, and Bonnie A. Nardi. *Acting with Technology: Activity Theory and Interaction Design*. illustrated edition. The MIT Press, 2006. Print.

- Schuler, Douglas. *Liberating Voices: A Pattern Language for Communication Revolution*. The MIT Press, 2008. Print.
- Sun, Huatong. *Cross-Cultural Technology Design: Creating Culture-Sensitive Technology for Local Users*. 1st ed. Oxford University Press, USA, 2012. Print.

## Recommended:

- Banks, Adam J. *Race, Rhetoric, and Technology: Searching for Higher Ground*. Mahwah, N.J: Lawrence Erlbaum, 2006. Print. NCTE-LEA Research Series in Literacy and Composition.
- Gold, Matthew K., ed. [\*Debates in the Digital Humanities\*](#). Minneapolis: Univ Of Minnesota Press, 2012.
- Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press, 2005. Print. Clarendon Lectures in Management Studies.
- Miller-Cochran, Susan K., and Rochelle L. Rodrigo, eds. *Rhetorically Rethinking Usability: Theories, Practices, and Methodologies*. Hampton Pr, 2009. Print.
- Nystrand, Martin, and John Duffy, eds. *Towards a Rhetoric of Everyday Life: New Directions in Research on Writing, Text, and Discourse*. Univ of Wisconsin Press, 2003. Print.
- Potts, Liza. *Social Media in Disaster Response: How Experience Architects Can Build for Participation*. Routledge, 2013. Print.
- Spinuzzi, Clay. *Network: Theorizing Knowledge Work in Telecommunications*. 1st ed. Cambridge University Press, 2008. Print.
- Swarts, Jason. *Together with Technology: Writing Review, Enculturation, and Technological Mediation*. Baywood Publishing Co., Inc., 2007. Print.
- practice study design and implementation

# Attendance & Participation

Attendance and participation in this class are very important.

In this class, much of the work you will do requires you to present your ideas, interpretations, and writing in class. You may also be working in collaboration with your peers. For both of these reasons it is difficult or impossible to make up missed work.

You should make every effort to attend class. You should contact me prior to missing class by e-mail, phone, or otherwise. If your absence will affect your colleagues in class, you should notify them as well. Each day will be clearly outlined in the course schedule, so check there regularly so that you are prepared for class on any given day.

## Grades & Assignments

You must complete all major assignments. If you do not submit all materials for each project, you will not pass the class. I am particularly twitchy about work you do that involves your fellow students. Take it seriously.

You should submit your work on time. Late work will only be accepted if you consult with me prior to the class period in which the work is due. Work is considered to be late after 5:00 pm on the due date.

GPA	Percentage
A	100 – 94 percent
A-	93 – 90 percent
B+	89 – 87 percent
B	86 – 83 percent
B-	82 – 80 percent
C+	79 – 77 percent
C	76 – 73 percent
C-	72 – 70 percent
D+	69 – 67 percent
D	66 – 63 percent
D-	62 – 60 percent
F	59 and below

## **Professionalism**

I reserve the right to lower course grades dependent on unprofessional behavior to include but not be limited to class attendance, disrespectful behavior towards others, or turning in late work.

Graduate course work is a job, albeit one with terrible pay. As such you are expected to behave in a professional manner during both our class time and online interactions. Professionalism should be understood as not only showing up on time and being prepared and ready to work but also having an awareness of the implications of unprofessional behaviors i.e. bad grades. Each of us should feel free to express our thoughts and opinions openly, without fear of penalty, as long as we do so in a courteous way. Although we may not always agree with one another and may challenge each other to think about the course's materials in new ways, I expect you to treat every person in this class as a valuable and respected member. Refrain from speaking, whispering, sleeping, playing on the computer, checking your cell phone, or engaging in other disrespectful behavior while someone else has the floor. When you enter the classroom, you should be engaged with the class.

## **Course Projects**

### **Course Projects (1800 points total)**

#### **Professionalism**

I reserve the right to lower course grades dependent on unprofessional behavior to include but not be limited to class attendance, disrespectful behavior towards others, or turning in late work. Graduate course work is a job, albeit one with terrible pay. As such you are expected to behave in a professional manner during both our class time and online interactions. Professionalism should be understood as not only showing up on time and being prepared and ready to work but also having an awareness of the implications of unprofessional behaviors i.e. bad grades. Each of us should feel free to express our thoughts and opinions openly, without fear of penalty, as long as we do so in a courteous way. Although we may not always agree with one another and may challenge each other to think about the course's materials in new ways, I expect you to treat every person in this class as a valuable and respected member. Refrain from speaking, whispering, sleeping, playing on the computer, checking your cell phone, or engaging in other disrespectful behavior while someone else has the floor. When you enter the classroom, you should be engaged with the class.

### **Weekly responses: 100 points total DUE WEEKLY**

Before 5:00 pm on Wednesdays, each participant will post an informal response to the class discussion list for the course, using that week's readings (and/or synthesizing these with previous weeks' readings) to respond to one or more of the questions. Or— a writer might respond to someone else's responses, explore other questions she finds compelling, make connections to other areas of inquiry with which she is familiar . . . and so on. These responses should be roughly 250-500 words and be cast as constructive, crucial commentary. Further, at least five times over the course of the semester, each participant should respond briefly to one or more of the other writers' posts during the period between Wednesday night and our class meeting. (It perhaps goes without saying that participants should commit to carefully reading other responses before class meets. I'll say it anyway.) Each participant may "take off" composing a response the weeks in which she is preparing a critique for class discussions, as well as one additional week for whatever reason (conference, melt down, exhaustion). She should, however, still read others' responses during that week.

## **Leadership of class discussion for recommended text:**

### **100 points**

This class has many recommended texts; students will help the class understand one of these recommended texts by reading it together and presenting the relevant work to the class. Pairs of students will be responsible for preparing a presentation that depicts the text's main contribution to the field as well as a class handout or equivalent media that contains a complete reference, research questions/goals, methods used, findings, strengths and weaknesses and a recommendation for what sort of projects the text would be useful for tackling.

### **Peer review: 200 points**

The class format permits us to operate much like a professional design group might. So in addition to the major project, each team and individual will be asked to engage in peer review of others' work and to lead panel discussions which will examine important issues in interaction design. You will be allowed roughly a half hour for each project and be responsible for a very close and careful reading/response to a teams project. I want to stress that the review/response needs to be constructive and based on what we read in class (i.e., use the appropriate theoretical and design criteria, and don't nitpick the editing-level stuff). I'm going to try a new tool for this that may blow up in all our faces. We'll see.

## **Making Things**

Below is a list of the "making things" assignments for the course. Each of the assignments is a component of a larger, semester-long project that will require you to research and develop a information & interactions (a User Experience or "UX") that transform, for the better, a social practice you have observed. You should work as part of a team. Individual projects will be considered in special circumstances.

The specific purpose and even the venue for your design can vary widely. You may choose to develop interactions appropriate to a hand-held wireless device, a website, an information panel integrated into another product, etc. In fact, I encourage you to be creative and resist deciding on a particular format for your design until you have identified and begun to study the specific social practice(s) you wish to transform. Our aim in this course is true innovation, which requires thinking beyond the state-of-the-art in any particular social setting.

To break it down, your final project will yield UX design documents, including a prototype and a specification document. Your design may extend to include features of a hardware unit; in that case, you should plan to produce a mock-up physical prototype as well. Teams usually have fun with this aspect of the project.

### **#1 Individual Assessment: 200 points total (individual)**

This is a self-assessment in which you will describe your skills and abilities in five key areas: tools and techniques, teaming, design process, presentation & persuasion, and deliverables. You'll complete an initial assessment at the beginning of the course and a final assessment at the end. You should advance in each of these five areas over the course of the semester and, in the final assessment, point to evidence of this advancement.

### **#2 Project Pitch & Proposal 300 points (collaborative)**

Introduce your design concept and persuade the group of the user needs which support it. Discuss the preliminary analysis which supports your design concept, solicits feedback, and forecast next steps.

### **#3 Design Walkthrough w/ Work Models and Conceptual Design Memo 400 points (collaborative)**

Introduce the group to your initial design concept using object-oriented modeling diagrams and low-fi prototyping techniques as support. Focus on how the design transforms the current activity scenario to meet the needs & expectations of users.

### **#4 Final Design Presentation w/ Prototype Views and Specification 400 points (collaborative)**

*Presentation:* showcase your prototype views and persuade the group that your design choices are appropriate and buildable.

*Spec:* document your design in a way that communicates to potential developers and/or supporters that your design is viable.

### **#5 Final Design Reflection: 100 points (individual)**

*Reflection:* This is a paper that leads us through the theoretical underpinnings of your design for an academic audience. Ideally this would lead to a conference paper in a Digital Humanities or Digital Rhetoric conference. It should draw on texts from the class and be conference paper length

Each design phase ends with a presentation and document. You'll deliver the presentation to a review panel and a draft of your document on the penultimate day of each phase, and then meet with me on the last day to discuss panel feedback and revisions to the document for that phase.

## **Major Project Deliverables with Due Dates**

- Phase 1: Project Pitch (Late Sept.)  
Proposal (Draft Late Sept.; Final due Early October)
- Phase 2: Activity Models & Walkthrough (Late October)  
Conceptual Design Memo (Draft Late October, Final due Early November)
- Phase 3: Prototype Demo (last day)  
Functional Specification (Draft last day, Final due last day)

Your documents & presentations will need to appeal to both a community and academic/scholarly audience. Your research reading will be the primary way you gather evidence to support your design choices.

## **Phase 1:**

### **Week 1 – 8/20**

#### **On Building and Listening**

- The Negro Motorist Green-book. 1941. New York City: Victor H. Green, 1941. Print. Negro Motorist Green Book.
- Winner, Langdon. "Do Artifacts Have Politics?" *The Whale and the Reactor: A Search for Limits in an Age of High Technology*. 1st ed. University Of Chicago Press, 1989. 19–39. Print.

### **Week 2 – 8/27**

#### **On Building and Listening**

- Arendt, Hannah. *The Origins of Totalitarianism*. New. Harcourt, Brace, Jovanovich, 1973. Print.
- Feenberg, Andrew. "Subversive Rationalization: Technology, Power, and Democracy." *Inquiry* 35.3 & 4 (1992): 301–322. Print.

### **Week 3 – 9/3**

#### **On Building and Listening**

- Eubanks, Virginia. *Digital Dead End: Fighting for Social Justice in the Information Age*. The

MIT Press, 2011. Print.

- Young, Iris Marion. "Five Faces of Oppression" Justice and the Politics of Difference. Princeton University Press, 1990. Print.
- Powell, Annette Harris. "Access(ing), Habits, Attitudes, and Engagements: Re-thinking Access as Practice." Computers and Composition 24.1 (2007): 16–35. ScienceDirect. Web. 27 Oct. 2008.

#### **Week 4 – 9/10**

##### **Problem Framing**

- Kaptelinin, Victor, and Bonnie A. Nardi. Acting with Technology: Activity Theory and Interaction Design. illustrated edition. The MIT Press, 2006. Print.
- Bødker, Susanne. "A Human Activity Approach to User Interfaces." Hum.-Comput. Interact. 4.3 (1989): 171–195. ACM Digital Library. Web. 14 Aug. 2013.
- McPherson, Tara. "Why Are the Digital Humanities So White? or Thinking Other Histories of Race and Computation." Debates in the Digital Humanities. Ed. Matthew K. Gold. Univ Of Minnesota Press, 2012. 139–160. Print.

#### **Week 5 - 9/17**

##### **Needs Analysis**

- Grabill, Jeffrey T. Writing Community Change: Designing Technologies for Citizen Action. Hampton Press, 2007. Print.
- Losh, Elizabeth. "Hacktivism and the Humanities: Programming Protest in the Era of the Digital University." Debates in the Digital Humanities. Ed. Matthew K. Gold. Univ Of Minnesota Press, 2012. 161–186. Print.

#### **Week 6 - 9/24**

##### **Proposal Presentations**

## **Phase 2:**

#### **Week 7 - 10/1**

##### **Reviews & Phase 2**

- Holtzblatt, Karen, and Hugh Beyer. "Making Customer-centered Design Work for Teams." Commun. ACM 36.10 (1993): 92–103. ACM Digital Library. Web. 14 Aug. 2013.
- Swarts, Jason. "Being Somewhere: The Meaning(s) of Location in Mobile Rhetorical Action". Enculturation. 15.
- **Book Presentation:** Swarts, Jason. Together with Technology: Writing Review, Enculturation, and Technological Mediation. Baywood Publishing Co., Inc., 2007. Print.

#### **Week 8 - 10/8**

##### **Activity Tracing & Contextual Inquiry**

- Kaptelinin, Victor, and Bonnie A. Nardi. Acting with Technology: Activity Theory and Interaction Design. illustrated edition. The MIT Press, 2006. Print.
- Latour, Bruno. "Where Are the Missing Masses? Sociology of a Door." Print.
- **Book Presentation:** Latour, Bruno. Reassembling the Social: An Introduction to Actor-Network-Theory. Oxford: Oxford University Press, 2005. Print. Clarendon Lectures in Management Studies.

#### **Week 9 - 10/15**

##### **Object-Oriented Modeling**

- Hart-Davidson, William, Mark Zachry, and Clay Spinuzzi. "Activity Streams: Building Context to Coordinate Writing Activity in Collaborative Teams." Proceedings of the 30th ACM International Conference on Design of Communication. New York, NY, USA: ACM, 2012. 279–288. ACM Digital Library. Web. 19 Aug. 2013. SIGDOC '12.
- Bowie, Jennifer L. "Beyond the Universal: The Universe of Users Approach to User-Centered Design." Rhetorically Rethinking Usability: Theories, Practices, and Methodologies. Ed. Susan K. Miller-Cochran & Rochelle L. Rodrigo. Hampton Pr, 2009. 135–163. Print.
- **Book Presentation:** Miller-Cochran, Susan K., and Rochelle L. Rodrigo, eds. Rhetorically Rethinking Usability: Theories, Practices, and Methodologies. Hampton Pr, 2009. Print.

## **Week 10 - 10/22**

### **Cross-Cultural and Situational Use**

- Sun, Huatong. Cross-Cultural Technology Design: Creating Culture-Sensitive Technology for Local Users. 1st ed. Oxford University Press, USA, 2012. Print.
- Potts, Liza. "Designing for Disaster: Social Software Use in Times of Crisis".
- **Book Presentation:** Potts, Liza. Social Media in Disaster Response: How Experience Architects Can Build for Participation. Routledge, 2013. Print.

## **Week 11 - 10/29**

### **Activity Models & Walkthrough Presentations**

## Phase 3:

### Week 12 - 11/5

#### Reviews and Phase 3

- Gurstein, Michael. What Is Community Informatics (and Why Does It Matter)? 2007. Web. 11 Aug. 2012.
- Banks, Adam J. "Rewriting Racist Code: The Black Jeremaid as Countertechnology in Critical Race Theory." *Race, Rhetoric, and Technology: Searching for Higher Ground*. Mahwah, N.J: Lawrence Erlbaum, 2006. 86–104. Print. NCTE-LEA Research Series in Literacy and Composition.
- **Book Presentation:** Banks, Adam J. *Race, Rhetoric, and Technology: Searching for Higher Ground*. Mahwah, N.J: Lawrence Erlbaum, 2006. Print. NCTE-LEA Research Series in Literacy and Composition.

### Week 13 - 11/12

#### The Everyday

- Schuler, Douglas. *Liberating Voices: A Pattern Language for Communication Revolution*. The MIT Press, 2008. Print.
- Cintron, Ralph. "'Gates Locked' and the Violence of Fixation." *Towards a Rhetoric of Everyday Life: New Directions in Research on Writing, Text, and Discourse*. Ed. Martin Nystrand & John Duffy. Univ of Wisconsin Press, 2003. 5–37. Print.
- **Book Presentation:** Nystrand, Martin, and John Duffy. *Towards a Rhetoric of Everyday Life: New Directions in Research on Writing, Text, and Discourse*. Univ of Wisconsin Press, 2003. Print.

### Week 14 - 11/19

#### Project Time

### Week 15 - 11/26

#### Project Time

### Week 16 - 12/3

Final Design Presentation w/ Prototype Views,  
Reflection Papers