Professor Janell Rothenberg, Ph.D.
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Office: Leighton 224 (In Women & Gender Studies)
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COURSE DESCRIPTION
Given increasingly fast product cycles of the tech industry, success or failure of a particular technology in the marketplace often depends on user buy-in rather than just the quality of code. At the same time, users for any given technology are increasingly diverse. How do we make products that leverage that diversity? More and more, anthropologists and other social scientists are collaborating with engineers to build more usable technologies for these diverse groups of users. While there are many methods for designing better user experience, this course will focus on how anthropology's ethnographic method can help us design for diversity. Ethnographic research is a qualitative method of person-centered inquiry that uses in-depth observation and interviewing in natural settings to gain insight into what people actually do and believe in their everyday lives.

The first part of class will focus on the theory and practice of ethnography. These weeks will include learning about why the increasingly pervasive nature of technology demands that cultural and social research informs how we engineer and innovate. This part of class will conclude with a proposal for your team's term project. In the second part of class, we will focus on specific forms of diversity, the design problems they raise, and how ethnography can be applied to develop inclusive solutions. The themes for these weeks will be accessibility and universal design, race and the ethics of inclusion, gender and implicit bias, and cultural difference in a global world. During this part of class, students will work on their term project during and outside class in collaborative teams. These projects will use ethnographic research to examine how people actually use technologies and inform prototypes that respond to user needs. This research will be conducted either on the Carleton campus or with our community partner, the Northfield Public Schools. Our learning will be supplemented with visits from Carleton alumni working in user experience or the creation of inclusive technologies and workplaces. We are happy to have you join us in following the intersection of culture, society, technology, and design.

LEARNING OUTCOMES
The SOAN Department of has identified Student Learning Outcomes for SOAN majors. In this course you will learn three of these outcomes:
● *Formulate appropriate anthropological research questions about socio-cultural phenomena.*
● *Apply anthropological theory to analyze socio-cultural phenomena.*
● *Use your understanding of historical & contemporary socio-cultural phenomena to engage the world.*

CLASS READINGS
The two required books are: Genevieve Bell and Paul Dourish's ***Divining a Digital Future*** (MIT Press, 2014) and Sam Ladner's ***Practical Ethnography*** (Routledge, 2014). Find them in the bookstore or online through the library. All other required readings are marked by an asterisk (*) on the class schedule and will be posted to Moodle. Throughout the term, we reserve the right to make changes to the readings. We will email you in advance. The most current version of the syllabus will be available on Moodle. You are expected to complete the assigned readings by class time and come prepared to participate in class discussion. If you are ever confused about what is due or are having trouble with the readings, please do not hesitate to contact us.

GRADING AND ASSIGNMENTS
Your grade during the term will be assessed through your participation, assignments, and quizzes. More detailed instructions for many of these activities will be posted on Moodle or handed out in class. Unless an assignment is due in class, deadlines are <u>no later than</u> 11:55pm on the due date. These due dates are firm. Please contact me immediately if you have any concerns about these assessments or due dates for any learning or related challenges. In the interest of building an inclusive learning community, we are more than happy to work with you to find adequate accommodations.

<u>Attendance – 10%</u>
Due - Every class meeting
Attendance is required.

<u>Participation – 10%</u>
Due - Every class meeting
Your participation will be assessed based on your commitment to class discussions. This includes contributing in each class meeting by responding to a question, reading something from your reading response, or in another way. We will provide plenty of opportunities. Participation includes leading class discussion with your team for about 15-20 minutes on either Tuesday or Thursday of week nine on a scholarly source relevant to your team's term project.

<u>Reading responses – 15%</u>
Due – 11:55pm before each class, unless otherwise indicated
For each class, write and post to the forum a response for each of that day's readings. Each response can take the form of either (A) three, 10-second Snaps collected in a Story and uploaded to Moodle or (B) a 150-200 word paragraph responding to a question you pose about the reading. In either case, you should focus on key concepts, arguments, or implications from the readings. Please just inform us at least a day in advance of when you will skip. During week 9, in lieu of regular class reading assignments, everyone in your team will be responsible on either Tuesday or Thursday of that week to post individual responses to a scholarly article for your term project. There will be no reading or reading responses due during week 10. *You are entitled to skip **<u>one</u>** day of reading responses without penalty.

<u>Zotero collection – 10%</u>
Moodle Shares – Before Wednesday May 31st
During the term, you are responsible for finding, saving and briefly annotating (around 100-150 words) at least ten popular sources related to the topics of the class (i.e. diversity and design, anthropology and technology, ethnography in the private sector, etc). Early in the term, you will learn how to use the open source reference manager, Zotero, and its browser extensions to keep this information organized. Please also post at least one source per week to the Moodle forum "Zotero Shares" in the appropriate discussion. All sources must be posted by the last day of classes, May 31st. Your ten sources must include at least two scholarly, anthropological articles and at least one of each of the following: blog posts, videos, news articles, social media, and podcast episodes.

<u>Take-home quizzes – 20%</u>
First Quiz (10%): From Thursday, April 20 at 5pm to Friday, April 21 at 5pm
Second Quiz (10%): From Thursday, May 18 at 5pm to Friday, May 19 at 5pm
Instead of in-class pop quizzes, these "take-home quizzes" will give you 24-hours to answer a series of short answers questions directly related to key concepts, arguments, and implications in either the assigned readings or alumni presentations.

Term project – 30%
As part of this assignment, you will need to follow this schedule of deadlines:

1. **Project Proposal and Task Outline (5%): Due in Class on Tuesday, April 25th**
   One proposal and task outline is required per team. Bring a hard copy to class and upload as one document to Moodle before class on April 25th. Proposals are 3-5 double-spaced pages. The required components for this assignment can be found at the end of this syllabus. For this proposal to be accepted, one or two representatives from each team will need to reserve a time on Google Calendar to meet with Janell individually in her office to go over the plan on either Wednesday, April 26th or Thursday, April 27th.

2. **Project Presentations (5%): Due in Class on Tuesday, May 30th**
   Presentations require a 1-2 page handout, two presentation slides, and full participation of your team. In order for me to print your handouts and organize the slides, upload them to Moodle by 11:55pm on Monday, May 29th. Presentations should follow the guidelines of Ch. 10 of *Practical Ethnography.*

3. **Individual Project Report (20%): Due on Moodle, Monday, June 5th by 5pm**
   Submit your individual project report (6-8 pages) on Moodle. This report will include a table of contents, introduction to the project, background on the design problem, an argument for the suitability of ethnography to this project, the results, and recommendations for next steps. You will need to use a minimum of five academic sources that are based on qualitative inquiry to support your report using the appropriate citation methods. You must include a bibliography. You can include additional images or figures if you wish. In order for your report to be accepted, you must also complete the self and team evaluation form on Moodle no later than the report deadline. Be honest and constructive in your evaluation. Reports should follow the guidelines of Ch. 10 of *Practical Ethnography.*

FORMATTING AND CITATION GUIDELINES
Your Zotero synthesis document, midterm essay, and final paper assignments must be typed, double-spaced, have 1-inch margins on all sides, and use size 12 Times New Roman font. **Please upload these assignments to Moodle as PDFs.** These assignments and your reading response posts should all follow the recommendation of the American Anthropological Association to use the *Chicago Manual of Style* format for all in-text citations, footnotes, and bibliographies. There are plenty of great sites with information on how to best follow this format. We recommend Purdue-OWL, owl.english.purdue.edu/owl/resource/717/01. You can also consider consulting at the library or buying a copy of Kate Turabian's *A Manual for Writers of Research Papers, Theses, and Dissertation: Chicago Style for Students or Researchers.* You can also consult the Writing Center for help in citing sources.

ACADEMIC INTEGRITY
You are expected to adhere to Carleton's code of academic honesty. Even in the event of participating in team projects, your final work should still reflect your own ideas and other people's ideas should always be credited. If you have any questions regarding this policy please visit http://apps.carleton.edu/campus/doc/integrity/ or come speak to me. Failure to follow Carleton's expectation will result in a failing grade and formal action with the administration.

OFFICE HOURS AND COMMUNICATIONS
Janell strongly encourages everyone to see her individually at least once during the term in her office hours, Wednesdays from 2:30-4:30pm in Leighton 224. In the second half of class, your group will need to meet with her outside of class time at a time that works for everyone. Regarding email please note that from Monday to Friday, both of us will try to answer emails within a 24-hour period. However, if you email us on the weekend, expect a response no earlier than Sunday evening.

LATE AND MAKE-UP POLICY
Unless you have a legitimate excuse for turning in an assignment late or missing and exam we will either not accept the assignment or deduct points from your grade. Although we are certainly sympathetic to emergencies, you must let us know well before the assignment or exam is due if you need alternative accommodations. If you think you might need alternative accommodations but are not sure, contact us as early as possible in the term and we will help you find the appropriate services to facilitate this.

ADDITIONAL RESOURCES
If you need any help dealing with the requirement of the course please let us know as soon as possible so we can direct you to the multitude of resources available to you at Carleton. It is important to remember that looking for support and improving skills is something that absolutely all of us should be doing. Four pertinent resources are listed below:

- **Accommodations for Students with Disabilities**
  The Disability Services office (Burton Hall 03) collaborates with students who have disabilities to provide and/or arrange reasonable accommodations. If you have, or think you may have, a disability, please contact Chris Dallager, Director of Disability Services, at 507-222-5250 or cdallager@carleton.edu to arrange a confidential discussion about reasonable accommodations.

- **Gould Library**
  Kristin Partlo, the social sciences reference librarian can help you will find anthropological and sociological sources online and in the library, as well as how to use Zotero effectively and collaboratively. Her email is kpartlo@carleton.edu. You can make an appointment with her either by email or by scheduling an appointment online at http://gouldguides.carleton.edu/kpartlo

- **IdeaLab**
  We will occasionally meet during class in the IdeaLab in the lower level (room 26) of the Weitz Center for Creativity. For access to the IdeaLab outside of class time and more information on what it includes, make an appointment to meet with Celeste. The IdeaLab's software list is available at http://apps.carleton.edu/idealab/about/software/.

- **The Writing Center**
  Located in 420 4th Libe, the Writing Center has peer-writing consultants who can work with you during any stage of the writing process. Hours and more information can be found on the writing center website, http://apps.carleton.edu/campus/asc/writingcenter/. You can reserve specific times for conferences in 420 4th Libe by using their online appointment system. Walk-ins are welcome.

- **Academic Civic Engagement (ACE)**
  "ACE" is an approach to education focusing on community-based learning, community-based research, and service learning. ACE learning goals are listed below. If you choose to do your final project with the schools, you will need to fill out a background check. For off-campus projects, make sure that at least one member of your group completes the required training on Sat., Apr. 8th from 1-2:30pm in Leighton 305. Director is Adrienne Falcón, afalcon@carleton.edu.

  > *ACE Learning Goals*
  >
  > *a) Understanding issues in their real world complexity*
  > *b) Recognizing and honoring different forms of knowledge that may reside in/with community partners*
  > *c) Awareness of your positionality, or who you are as you seek to do civic engagement efforts (such as gender, race, and/or socioeconomic background)*
  > *d) Doing – how can you take your course content and do something with it beyond the classroom while learning in the process*
  > *e) Developing leadership skills*
  > *f) Nurturing a commitment to life-long civic engagement*

COURSE SCHEDULE

PART I: DESIGN ANTHROPOLOGY AND THE ETHNOGRAPHIC TOOLKIT		
Week 1, Introduction to User Experience		
Tu Mar 28	"Learning from Users: Ethnographic Methods for Technology Design"	N/A
Th Mar 30	"How is Technology Social and Cultural?" - Skype Guest: Arah Bahn ('91 Carl), UX Consultant - In-Person Guest: Librarian Kristin Partlo	1. Intro & Ch. 3 of *Divining* 2. Ch. 1 of *Practical Ethnography* 3. Reading responses
Week 2, Introducing Ethnography		
Tu Apr 4	"What is Ethnography? What is it Not?" - Skype Guest: Amanda Ruzin ('01 Carl), Dir. of UX, HS2 Solutions	1. Ch. 4 of *Divining* 2. Ch. 2 of *Practical* & pp. 120-21 3. Reading responses
Th Apr 6	"What is Ethnographic Fieldwork? Notes from the Ethnography of Infrastructure in Morocco"	1. Ch. 5 of *Divining* 2. Ch. 8 of *Practical Ethnography* 3. Reading responses
Week 3 & 4 Ethnographic Methods and Case Studies		
Tu Apr 11	"(Ethnographic) Project Management, 101" - Skype Guest (1): Alexandra Zafiroglu, PhD in Anthropology, Principal Engineer at Intel - Skype Guest (2): Jacque Harper ('86 Carl), Product Owner, Caxy Consulting & Agile Coach	1. Ch. 3 of *Practical Ethnography* 2. Ch. 5 of *Practical Ethnography* 3. Ch. 10 of *Practical Ethnography* 4. Reading responses
Th Apr 13	"Ethnographic Method: Sampling and Analysis"	1. Ch. 8 of *Divining* 2. Ch. 7 of *Practical Ethnography* 3. Ch. 9 of *Practical Ethnography* 4. Reading responses
Tu Apr 18	"Ethnographic Case Studies: Mobility and Privacy" - In-Person Guests: ATS Technologists in the IdeaLab	1. Ch. 6 of *Divining* 2. Ch. 7 of *Divining* 3. Reading responses **Class meets in the IdeaLab**
Th Apr 20	"Ethnographic Method: Ethical Ethnography" - In-Person Guest: Kim Briske, Dir. of Technology Services, Northfield Public Schools	1. Ch. 6 of *Practical Ethnography* 2. Ruha Benjamin Keynote [Video] 3. Reading responses ***Due Friday - Quiz #1***

PART II: DIVERSITY AS A DESIGN PROBLEM		
Week 5, Accessibility and Universal Design		
Tu Apr 25	"Intro to Accessibility and Universal Design"	1. Aimi Hamraie, "Universal Design and the Problem of 'Post-Disability' Ideology" 2. Sara Hendren, "Investigating Normal: Technology and Ability," EYEO Festival 2015 3. Reading responses 4. **Project Proposal & Task Outline**
Th Apr 27	"Designing for Diverse Abilities" - In-Class Media: Comic book store for the blind *Design for Accessibility: A Cultural Administrator's Handbook*, National Endowment for the Arts - In-Person Guest: Josh Pepper ('97 Carl), Product Manager for Cortana, Microsoft	1. M.R. Nario-Redmond et al. "Crip for a Day: The Unintended Negative Consequences of Disability Simulations" 2. Ian Hamilton "VR & Accessibility," 3. Reading responses ***Class meets in Olin 004**
Week 6, The Ethics of Inclusion		
Tu May 2	"Profiling and Privilege" - In-class reading: Peggy McIntosh, "Unpacking the Invisible Knapsack"	1. Martin French and Simone Browne, "Profiles and Profiling Technology: Stereotypes, Surveillance, and Governmentality" (focus on pp. 264-280) 2. **Choose <u>one</u> of the Following:** - Joy Buolamwini, "The Algorithmic Justice League" - Suresh Venkatasubramanian et al, "Certifying and Removing Disparate Impact" 3. Reading responses
Th May 4	"Inclusion and Exclusion on Social Media" - In-Person Guest: Willy Lee ('97 Carl), IT Operations Manager, Minnesota Population Center	1. Black Twitter: "What is Black Twitter?" [Video] 2. Snapchat: "Snapchat raises eyebrows with Women's Day filter that lightens Frida Kahlo's skin" 3. Emojis: "Want a New Emoji?" 4. Reading response
Week 7, Gender and Implicit Bias		
Tu May 9	"Fighting Bias, Making Tech" - Skype Guests: Adam Canady ('16 Carl) & Michael Taufen ('15 Olaf), Software Engineers, Google	1. SSL Nagbot, "Feminist Hacking/Making: Exploring New Gender Horizons of Possibility" 2. Anil Dash, "It's time for Asian American men to stop being the 'model minority' in tech" 3. Reading responses 4. Take a Project Implicit test on gender bias

Th May 11	"Principles for Feminist and Queer Design" - Skype Guest: Shawn Samuel, VP of Engineering, HallmarkLabs	1. D'Ignazio et al, "Towards a Feminist Hackathon" 2. Light, "HCI as heterodoxy: Technologies of identity and the queering of interaction with computers" 3. Reading responses
Week 8, Cultural Difference in a Global World		
Tu May 16	"Designing Across Borders and Boundaries" - Skype Guest: Sarah Barrow ('05 Carl), UX Designer	1. Dori Tunstall, "Decolonizing Design Innovation: Design Anthropology, Critical Anthropology and Indigenous Knowledge" 2. Tricia Wang, "Why Big Data Needs Thick Data" 3. Reading responses
Th May 18	"Power, Technology, and 'Neutral' Accents"	1. Aneesh Aneesh, "Emerging Scripts of Global Speech" 2. Sonia Paul, "Voice is the next big platform, unless you have an accent" 3. Reading responses ***Due Friday: Quiz #2***
Week 9, Term Project Reading and Discussion		
Tu May 23	Student-led discussions I	Reading & responses: **only** *Acc-Tech, Magic, Schools, Programming Languages*
Th May 25	Student-led discussions II	Reading & responses: **only** *STEM Diversity, IdeaLab Tech, IdeaLab Space,*
Week 10, Conclusion		
Tu May 30	Research Presentations	1. Project Presentations ***Due Mon. 5pm: Project Report***

Project Proposal for SOAN 161, Term Project

Please post as one PDF your group's proposal and task outline. Also, bring a hard copy of these documents to class. We will meet with each team individually during to go over your plan. Upload the documents here at some point on Tuesday.

Proposals should be 3-5 double-spaced pages (follow the paper formatting guidelines on your syllabus). Proposals should contain the following sections:

1. Title and Heading

- Mention all researchers by name at the top of the document

2. Research Objectives (2 paragraphs)

- The first objectives paragraph should explain the issue you are looking at, your purpose for doing so, and your research question(s).

- The second objectives paragraph should explain why this is an important issue to study and the ways in which it fits with the topic of our course, "Designing for Diversity: Anthropology and New Technologies."

3. Literature Review (1-2 paragraphs)

- This section should indicate what your group has read and found in the anthropological/ethnographic literature that helps to contextualize your project. Also indicate what you hope to search for in the literature going forward.

4. Methodology (2-3 paragraphs)

- This section should start by describing the place/places where your group will be researching and who you plan to talk to. Indicate how you plan to establish access and any challenges that you anticipate.

- The second part of this section should describe the methods you plan to use to study the issue you have chosen. These must include at least some interviews and observation but you can use other qualitative methods too. Please keep your quantitative methods to a minimum. Make sure that you indicate how these methods match your research objectives.

5. Ethics (1-2 paragraphs)

- Describe how your team will ensure that your research, analysis, and reporting will be ethical. Make sure to specifically address the need for informed consent and participant privacy. If your project will need IRB approval, please explain why.

6. References Cited (optional)

- This is where you should mention the sources you use in your literature review and elsewhere. Remember to follow the bibliographic guidelines described in your syllabus.

SOAN 161 S2017, Term Project Plan (adapted from Ladner, *Practical Ethnography*, p. 45)		
	Deadline	**Tasks/People Involved**
Planning - Weeks 3 through 4		
a. Research and sampling design		
b. Interview and observation guide		
c. Background research		
d. Research Proposal	*TU, APR. 25TH – in class and online*	
Insight Collection - Weeks 5 through 7		
a. Recruitment		
b. Ethnographic interview		
c. Observation		
Analysis - Weeks 8 through 9		
a. Preliminary findings (including narrowing on theoretical framework)		
b. Collaborative analysis with stakeholder/s (optional)		
c. Meeting with Janell or Celeste to discuss preliminary findings		
d. Present supporting literature	*TU, MAY 23 OR TH, MAY 25 – in class*	
Applying insights - Week 10 through exam week		
a. Project presentation	*TU, MAY 30 – in class*	
b. Communicate findings to stakeholders (optional)		
c. Report document preparation and submission	*MO, JUNE 5 – online by 5pm*	