Meets: Thursdays 1-4 PM, 2245 North Quad
Instructor: Tawanna Dillahunt
Office: 4460 North Quad
Office hours: Tuesdays 3-4 PM
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Note: Syllabus subject to change and I will inform you in class of any changes. You can find the most up to date version on Canvas.

COURSE OVERVIEW:
Researchers and designers from computational fields are beginning to understand how the complexity of systemic, structural, and historical circumstances affecting communities (e.g., poverty, illiteracy, and geographical isolation) shape the design process. For example, participatory design (PD) and community-based participatory research (CBPR) have been heavily used in HCI to design with underserved communities. However, there is an opportunity for HCI researchers and practitioners in related fields to improve their use of these methods to account for circumstances that may impact participants' engagement (or lack thereof) in the design process.

This seminar will examine methods used in empirical research studies that focus on designing or researching computational technologies with or for people from underserved communities (e.g., empirical studies from IS-related fields such as HCI and CSCW). We will analyze how principles of PD and CBPR are applied to these studies. This course will provide you with a critical understanding of established or perhaps unestablished research design methods, which support the creation and evaluation of ICT systems and services that would be inclusive and beneficial to a broad range of users.

As a class, we will contribute a framework, or model for understanding how to use specific research methods and when, and the strengths and weaknesses of each method. The research methods investigated will not be fully comprehensive—these methods will be derived from a survey of related research provided by the instructor and also based on students' current research and research interests.

Those of you who have formulated a few focused research questions, intend to engage with populations who may be marginalized or understudied in your area of focus, and have considered the use of methods described above are encouraged to enroll and would most benefit. An ideal outcome from this class is a well-formed proposal that you can execute over the summer and/or submit to an agency for funding. A key course goal is to create opportunities for you to refine your method/approach. Feel free to use this class as an opportunity to pilot new methods and discuss their outcomes. Ultimately, I'd

like for you to walk away with an opportunity to publish your findings to your venue of choice.

Explanation of Prerequisites or Corequisites:
Prerequisites are available through SI courses that teach skills in contextual inquiry, qualitative interviewing skills, needs assessment and some survey design. This course is not designed to be an introductory methods course. All students will need to have completed all PEERRs training and will need to complete an IRB if necessary.

Learning Goals and Objectives:
On successful completion of the course the student will be able to meet the following learning objectives:

1. To critically evaluate the concepts and principles that underlie research methodologies designed with special populations and situations in mind (e.g., Action Research, Participatory Design and Community-Based Participatory Research)
   a. To define AR, PD and CBPR.
   b. To identify and explain the key components of and differences between AR, PD and core principles of CBPR
   c. To describe the strengths and weaknesses of PD and CBPR.
   d. To critically evaluate the underlying PD and CBPR concepts to evaluate user experiences.

2. To explain the rationale for the use of PD and CBPR to address problems with computational solutions.

3. To compare and contrast the differences between traditional research methods and methods that are designed to be more inclusive.

4. To discuss differences among specialized groups that could impact the use of certain methods (particularly from PD).
   a. To make informed decisions about which technique(s) to use for certain populations and why.

5. To contribute to a model or framework that includes a curated collection of methods for creating and evaluating more inclusive ICTs.

COURSE RESOURCES

Optional Textbook:
I will draw insights from the books: *Methods in Community-Based Participatory Research for Health* by Barbara Israel et al. ; *Design for Inclusivity* by John Clarkson, Julia Cassim,

and Roger Coleman, and *Decolonizing Methodologies: Research and Indigenous Peoples* by Linda Tuhiwai Smith.

Course Readings:
Course readings will be available via University of Michigan Canvas (or the World Wide Web).

There will be additional assigned readings drawn from a range of sources including your own. These readings and other resources will be available via Canvas. Weekly readings will be located in subfolders labeled by week number.

Assignment Submission:
For all writing assignments, please use a digital format that permits inline comments. Microsoft Word and/or Google Docs are fine. You will upload all assignments to Canvas.

All assignments should be turned in by 8 pm. each Wednesday before class, on Canvas. Name the file with your surname and the name of the assignment. For example, dillahunt_summary.doc. For group assignments, if applicable, please use surname(s) in alphabetical order, followed by the name of the assignment. For example, dillahunt_hsiao_summary.doc.

Assignments that are submitted late will lose 2/3 of a letter grade on the first day that an assignment is late. After that, 1/3 of a letter grade will be deducted for each day the assignment is late, up to two whole letter grades. Students may request an extension but they must contact me 24 hours in advance and give a valid reason why they are late.

Grade reconsideration:
While I do my best to grade each student fairly, if you believe the grade you received on an assignment is inappropriate, you may ask to have your grade reconsidered. To do so, explain to me in an email why you feel your work deserves re-grading. You should provide details and point to specifics in the assignment that you feel merit a higher grade. Requesting grade reconsideration does not ensure that your grade will change, but your arguments will be carefully considered. *Note: one of three outcomes is possible: your grade may be raised, it may remain the same, or it may be lowered.*

ASSIGNMENTS AND GRADING

Article synthesis:
Students will prepare two 1-2-page (500-1000 words) synthesis for each of at least three articles, ideally related to your area of interest, that you select on your own. If you're unable to determine a topic or articles, feel free to reach out to me. By the end of the semester, the class will have a collection of synthesized articles as well as a spreadsheet capturing key factors about the paper (e.g., title, author, abstract, population targeted, the study goal and research questions asked, research methods used, group dynamics encountered, and outcomes).

Article presentation:
Due to the number of students currently registered for the class, we will need to be flexible in our schedule. With 18 students, you will likely only be able to discuss one set of synthesized articles and you will likely need to do so in groups (2 or 3) starting on January 30th. You will present your synthesis and lead a discussion/activity of this work. You will have at least 35-40 minutes to present and time for reflection/discussion/in-class activity. The following is a *suggested* flow for powerpoint slides though feel free to improvise. Some have opted to use this time to pilot or propose a new method given the results of their synthesis or new study design all together:

1. Article Title, author(s), year of publication
2. Abstract, population targeted, goal of study and research questions asked, research methods used, group dynamics encountered, and outcomes).
3. Literature background (note key points and citations),
4. Population targeted (unique traits or characteristics about the population; pluralisms)
5. Research question(s), major hypotheses (presentation should note underlying arguments)
6. Target technology or application being developed or evaluated
7. Key aspects of the research design (research design, sample size, data collection, location of study)
8. Key aspects of the research methods (what methods were used and why?)
9. Your evaluation of the strengths and potential weaknesses of the methods used and why? Students will increase their knowledge of the strengths and weaknesses based on summaries and student presentations.
10. Major Findings
11. Discussion points
    a. Aspects of trust, power, culture and cultural competence, recognition of communities' assets (Johannah and Swartz, 2019)
    b. How did the community benefit from this research? How was this assessed? (If not, how do you propose assessing potential benefits?)
12. Your personal thoughts/reflections (are the results believable, were the methods valid, what are alternative approaches to the methods used, how would you extend/redo this work, etc.)

Each week's presenters will upload their synthesis and slides before class **(Wednesday 11:59pm)** to Canvas for other students to preview and prepare questions.

Pre-Proposal:
You will be expected to submit an initial proposal of your work. Details will be provided on Canvas about the contents of the pre-proposal.

Mid-Semester Check-in:
You will be evaluated around the middle of the semester on course learning goals, your progress on your final paper so far, and on your personal reflections of the course. This will count toward your weekly assignment and class and participation grades.

Final paper:

You will be expected to write a draft outline of a final paper (5-10 pages) and final paper (10-25 pages) for this course, which is high enough quality to submit to a conference or journal in your field. I encourage you to use your journal or conference's article template throughout the course and treat it as a working paper, or work in progress that you plan to submit at the end of the course.

If you are a junior Ph.D. student or a master's student and do not have access to existing data or results for your final paper, you can write an extended literature review (based on prior summaries) that can be used to motivate a future study.

Assignment	Class # and Date	Assignment Due Date	% of final grade)
Completion of Weekly Assignments	Ongoing	Ongoing	25%
Course Background and Overview / Introduction	1: January 9		
● Topics: Intersectionality, Gaining entry as an outsider (Statements of positionality) ● Methods: Introduction to PD, CBPR, and Assets-Based Approaches ● Assignment due: Reflections on who you are as a researcher; Your research questions; Sign up for presentations based on your domain of interest	2: January 16, 2020	January 15, 2020 (all assignments due by 7pm)	
● Topic: Applications of PD, CBPR, and Assets-Based Approaches ● IRB completed if necessary	3: January 23, 2020	January 22, 2020 (all summaries due by 11:59pm)	
● Topic: AI and Smart Technologies ● Article summary, presentation, and lead discussion on methods ● Reading Synthesis Assignment	4: January 30, 2020	January 29, 2020 (synthesis due by 7pm)	

• Topic: Accessibility | People with Disabilities and Inclusive Design • Vaishnav Kameswaran (guest speaker) • Draft outline of Final Paper; Article summary, presentation, and lead discussion • Outline of your final project paper due	5: February 6, 2020	February 5, 2020 February 6, 2020 (outlines due by 7pm)	
• Topic: LGBTQ Populations • Jean Hardy (guest speaker) • Article summary, presentation, and lead discussion	6: February 13, 2020	February 12, 2020	
• Topic: Inclusive Approaches to Analyzing "Big Data" | Social Media • Article summary, presentation, and lead discussion	7: February 20, 2020	February 19, 2020	
• Topic: Children, Aging Populations, and Health (Deconstructing PD) • Christina Harrington, guest speaker • Article summary, presentation, and lead discussion	8: February 27, 2020	February 26, 2020	
NO CLASS THIS WEEK Spring Break	9: March 5, 2020		
• Mid-semester Check-in (Synthesis)	10: March 12, 2020	March 11, 2020	
• Topic: Resource-Constrained Populations (Immigrants, Refugees, Low-Income) • Proposal Status / Discussion	11: March 19, 2020	March 18, 2020	

● Topic: Education and Novice Programming ● Proposal Status / Discussion ● Student check-in; Brief project updates and draft of your final proposals;	12: March 26, 2020	March 25, 2020 March 26 (drafts of your final proposals due)	
● Tentative Special Topics: Ethics, Privacy, and Politics of Design ● Proposal Status / Discussion	13: April 2, 2020	April 1, 2020	
Class Attendance & Participation	Ongoing	Ongoing	25%
● Proposal Status / Discussion ● Proposed Article & Methodology due	14: April 9 -	April 8	10%
● Proposal Status / Discussion	15: April 16	April 15	10%
Final Paper	N/A	April 16	30%

All assignments will be graded according to the rubric below:

Letter Grade	Points	Interpretation
A+	95 -100	Extraordinary achievement. Rarely given.
A	85 - 94	Consistently distinguished performance in all course aspects.
A-	80 - 84	Strong, solid achievement in most aspects of the work.
B+	75 - 79	Good performance. Consistent with performance expected of students.
B	73 - 76	Acceptable.
B-	70 - 72	Borderline
C+	67 - 69	Poor performance. This is a marginal grade which alerts students to their limited performance in a particular course.
C	63 – 66	Very poor performance

C-	70-72%	Minimal. Performance not at a graduate student level. Student should review his/her progress in the program with the associate dean for academic affairs[Office2] .

COURSE POLICIES

Attendance
Students are expected to participate in class sessions as scheduled. Missing a significant number of classes, or class disruptions will result in a deduction from the course grade.

Classroom Etiquette
To create and preserve a classroom atmosphere that optimizes teaching and learning, we all share a responsibility in creating a civil and non-disruptive forum. Students are expected to conduct themselves at all times in this classroom in a manner that does not disrupt teaching or learning. Classroom participation is a part of your grade in this course. Our in-class discussions should be respectful and courteous to everyone, and relevant to the topic we are discussing. Our discussions are meant to allow us to hear a variety of viewpoints and this will happen if we respect each other and our differences. Our time is valuable and behavior which disrupts our learning process may lead to point reductions and/or removal from class.

This course works best when:
- We are all respectful of each other and each other's time and ideas,
- When we are active participants in class discussions and activities,
- When we share our past experiences as it relates to the class.

Do your best to be on time to class. Please be in your seat and ready to begin class promptly at 1:00pm.

*The classroom etiquette clause is an updated and modified version of East Carolina University's Office of Student Affairs' disruptive behavior clause here:
https://www.ecu.edu/cs-studentaffairs/dos/customcf/classroom_disruption.pdf

Accommodations for Students with Disabilities
If students require an accommodation for a disability, please let the instructor know at your earliest convenience. Some aspects of this course, the assignments, the in-class activities, and the way we teach may be modified to facilitate participation and progress. As soon as students make the instructor aware of necessary arrangements, they can work with the Office of Services for Students with Disabilities (SSD) to help determine appropriate accommodations. SSD (734-763-3000); **http://www.umich.edu/~sswd/)** typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. The instructor will treat any information students with disabilities provide will be treated as private and confidential.

Academic Integrity

Collaboration: UMSI strongly encourages collaboration while working on some assignments, such as homework problems and interpreting reading assignments as a general practice. Active learning is effective. Collaboration with other students in the course will be especially valuable in summarizing the reading materials and picking out the key concepts. Students must, however, write their own homework submission on their own, in the individual student's own words, before turning it in. Students who work with others on the homework must list any and all collaborators on the written submission. Each course and each instructor may place restrictions on collaboration for any or all assignments. Read the instructions careful and request clarification about collaboration when in doubt.

Plagiarism Policy:
Plagiarism is the use of another person's words or ideas without attribution to their source. In American intellectual culture, this is considered a form of cheating, dishonesty, and/or theft. At the University of Michigan and in professional settings generally, plagiarism is an extremely serious matter.

In your writing for this course (and in most professional settings), you should paraphrase whenever possible. This helps you process and understand what you have read. If the exact phrasing is so perfect and essential that you truly need to borrow another writer's words, you can quote them, but all quotations must be clearly marked and properly attributed. You may obtain copy editing or other technical assistance (e.g. grammar, English as a second language help), and you may discuss your ideas with others — but **all substantive writing and ideas must be your own or else be explicitly attributed to another, using a citation.** Any standard citation format is acceptable although my preference is APA. What matters is that you provide sufficient detail for someone else to easily relocate your source, even years later. URLs alone are never acceptable as citations, because they change frequently and do not allow the reader to clearly identify the source without the extra step of visiting the link.

All cases of plagiarism will be reported immediately. There will be no warnings, no second chances, no opportunity to rewrite. ***Consequences can range from failing the assignment (a grade of zero) or failing the course to expulsion from the University.*** For additional information about plagiarism, see the Rackham pamphlet on Academic Integrity and Plagiarism: What It is and How to Recognize and Avoid It from Indiana University. If you have the slightest doubt about whether you are using the words or ideas of others appropriately, please ask.

Course Reading List