Participatory Wellbeing for Underserved Communities

Instructor Name: Dr. Aisling Kelliher (pronounced ASH-LING). She/her.

Email: aislingk@vt.edu
Website: http://people.cs.vt.edu/~aislingk
Office: 105, Media Building | Office Hours: Wednesday, 10:30 – 11:30am by appointment
Classroom: Zoom: https://virginiatech.zoom.us/j/93838980166?pwd=NE9zc3pPZHtVUXNZ3YxZmh4ZThudz09 Meeting ID: 938 3898 0166; Passcode: 823079. In Person: #103 Media Building, 101 Draper Street
Class Meeting Day and Hours: Tuesday/Thursday: 2:00 – 3:15pm

**Syllabus is flexible, dynamic, and liable to change. You will be notified of all updates/changes**

Course Topic
Global pandemics from the Black Death to Covid-19 disproportionally impact the health, mortality, security, and wellbeing of minority and underserved communities. Digital technologies including track and trace apps, GPS surveillance, AI diagnosis, and telemedicine provide some mechanisms to combat the spread of disease, while also instilling fear, infringing privacy, and further reinforcing health, socio-economic, and structural inequalities. Developing digital technologies for the fullness of human experience requires consideration of numerous factors and necessitates the input, co-operation, and participation of diverse stakeholders. In response, this class will include considerations and questions such as: how can researchers authentically engage with underserved communities to co-create inclusive and accessible digital solutions? what technical, economic, legal, social or political challenges might engineers and designers encounter in developing and implementing accessible or assistive technologies? what role can empathy play in participatory design practices and how can it support the development of health and wellness technologies for the fullest range of human experiences? This hybrid course (hybrid meaning online/in person AND seminar/studio) will interrogate academic and popular texts, social media, audiovisual material, and computational artifacts bridging both historical and emerging areas of contemporary inquiry related to the topic. Students will encounter and then use a variety of theoretical, philosophical, and pragmatic lenses to study, analyze, and write about course material. Throughout the semester, students will complete digital prototype assignments and co-design a final digital project in collaboration with community stakeholders.

Learning Objectives
By the end of the course, students are expected to demonstrate the ability to:

- Critically read, analyze, and discuss participatory design (PD) methods, outcomes, communities of impact, and opportunities.
- Demonstrate a knowledge of the history, theory, influences, and emerging themes in PD, including competing and supportive theories, practice, and praxis
- Conduct a well-defined literature review
- Discover and scope a research problem/question
• Construct and present a concise argument that advances the discourse on the course theme
• Implement an ethical initial PD exploration with a defined community
• Clearly articulate ideas in publishable academic writing

**Instructional Methods and Class Activities**
Classes will primarily consist of student and professor led discussions. In addition, we will have multiple guest presentations either "live" during class time or as posted Q&A videos between me and the guest. Students will participate in and lead in-class and online discussion/presentations. Bringing examples from outside of the class to both the discussions and your assignments is vitally important. Required readings and viewing material will be available either as a link or as a downloadable pdf from Canvas. In carrying out the readings, students must consider and articulate who the author(s) of the work is, the time in which the article was written, the venue and audience, and the following critical and receptive response to the material.

Guests include **Dr. Barbara Barry** (Mayo Clinic), **Ronan Mac Domhnaill** (Cred. Solutions), **Kristin Hughes** (Carnegie Mellon University), **Christine Gaspar** (Center for Urban Pedagogy), **Dr. Carl DiSalvo** (Georgia Tech) and Dr. Chris Williams (Virginia Tech DREAMS lab).

**Attendance Policy**
Students are expected to attend all classes as best they can. That said, we are in the middle of a global pandemic, with so much uncertainty, so there will not be any formal graded requirement that you attend class. Please just simply let the instructor know if you cannot attend (short-term or long-term) at your convenience. There will be no need for medical certification or any other formal documentation to explain any absence. An email to aislingk@vt.edu will suffice. As a hybrid class, my intention is to meet with you in person at the Media Building to discuss your proposed written paper assignments. We can also meet one-on-one over video chat if you prefer. If you choose to meet in person, you must agree to abide by the Virginia Tech Wellness principles. If you are exhibiting even very slight signs of illness, you must not attend class or a meeting with me in person. Notify me by email and follow the instructions posted at https://vt.edu/ready/health.html#tips. In addition, to uphold the Virginia Tech Wellness principles, you must do the following:

• Wear a face covering during class or office hour meeting times, including as you enter and exit the classroom in the Media Building
• Maintain the designated distancing guidelines of the classroom
• Enter and exit the Media Building and the classroom according to posted signage

**Required Texts**
There are no required texts for this class. Digital and scanned reading/viewing material will be provided by the instructor and available on Canvas. I welcome (and super encourage) the submission of reading links/urls as supplementary material - send them my way!
**Evaluation**
Students will be evaluated on the quality of their active, productive participation in class discussion (both verbal and written) of the assigned reading and viewing material. The quickfire assignments will be evaluated on the quality of their creativity and relevance to the assignment topic. The two paper assignments will be evaluated for overall relevance, insight novelty, clarity of exposition, quality of references and scope of contribution. Students will receive written feedback and grades on assignments/participation at regular intervals during the semester and standard overall grades at mid-term and at the end of the semester.

**Grading Policy**
Reading analysis and discussion (20%)
Quickfire assignments (20%)
Literature review paper (20%)
Final Paper (40%)

**Academic Integrity**
This is expected at all times. All necessary and appropriate sanctions will be issued to all parties involved with plagiarizing any and all course work. Plagiarism and any other form of academic dishonesty that is in violation with the Student Code of Conduct will not be tolerated. Please refer to the following link for additional information

**Academic Accommodations**
To request academic accommodations due to a disability, please review the information available at https://ssd.vt.edu/accommodations.html. This is an important step as accommodations may be difficult to make retroactively. In addition, please let me know if you are experiencing any difficulty with meeting the class requirements. I am more than willing to work with you on making this a positive and constructive experience.

**Final Words**
We are in this together. I'm excited to work with you and get to know you. I want to help you with your studies and assist you in moving forward with your academic and professional career. This is such a profoundly strange time for all of us. Let's take it one day at a time. That's the best we can do.
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<tr>
<th>Assignment</th>
<th>Class Date</th>
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<th>Grade %</th>
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<td>Reading Analysis and Discussion</td>
<td>All</td>
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<td>Introduction to class and topic Introduction readings</td>
<td>August 25</td>
<td>August 27</td>
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<td>Participatory Design Overview &amp; Perspectives Healthcare</td>
<td>September 1</td>
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<td>Disability and Inclusion</td>
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<td>Dr. Chris Williams</td>
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<td>Children + parents</td>
<td>September 22</td>
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<td>Kristin Hughes</td>
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<td>Refugees, immigrants, and displaced peoples</td>
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Thursday August 27th: Introduction and what is going on???
Health Equity Considerations and Racial and Ethnic Minority Groups, CDC report.
Desis and COVID 19

Tuesday September 1st: Participatory Design Overview and Perspectives

Thursday September 3rd: Participatory Research and Healthcare


**Tuesday September 8th: Disability, Accessibility, and Inclusion**


[https://cripcamp.com/](https://cripcamp.com/) | *Crip Camp Trailer* (full movie available on Netflix)

**Inclusive Design Toolkit**

**Thursday September 10th: Dr. Barbara Barry, Mayo Clinic**


Barbara Barry. Stanford MedX, 2017 *Empathy as a constant - improving college student health by designing in community*


**Tuesday September 15th: Gender/LGBTQI**


Excellent resource: [http://oliverhaimson.com/digitaltrans.html](http://oliverhaimson.com/digitaltrans.html)

**Thursday September 17th: Dr. Chris Williams**
DREAMS lab designs novel respirator for health care workers fighting COVID-19. VT News, August 27, 2020

Shortage of personal protective equipment endangering health workers worldwide
US hospitals don’t have what they need to fight off COVID-19

3D PRINTERS ARE ON THE FRONT LINES OF THE COVID-19 PANDEMIC

Tuesday September 22nd: Children and Parents

Thursday September 24th: Ronan MacDomhnaill, Cred.15
Intact Beyond. https://intactbeyond.com/
Sullivan Foundation: https://sullivanfdn.org/

Tuesday September 29th: Race

Tuesday October 6th: Kristin Hughes, Carnegie Mellon University

Projects:
Thursday October 8th: Refugees, immigrants, and displaced peoples
Ana Maria Bustamante Duarte, Nina Brendel, Auriol Degbelo, and Christian Kray. 2018. Participatory Design and Participatory Research: An HCI Case Study with Young Forced Migrants. ACM Trans. Comput.-Hum. Interact. 25, 1, Article 3 (February 2018), 39 pages. Suggested listening: This American Life Podcast about life in a Greek refugee camp. Part One - are we there yet? and Part Two: Don't have to life like a refugee

Thursday October 15th: Indigenous Communities

Tuesday October 20: Rural Communities
Laura Maye, Sarah Robinson, Nadia Pantidi, Liana Ganea, Oana Ganea, Conor Linehan, and John McCarthy. 2020. Considerations for Implementing Technology to Support Community Radio in
Alexandra Crosby. Design Activism in an Indonesian Village. Design Issues 2019 35:3, 50-63

Thursday October 22: Sustainability

Tuesday October 27th: ICT4D - Discussant lead Aakash

Thursday October 29th: Animals - Discussant lead Feiyu
Tuesday November 3rd: Big Data - Discussant - all

Thursday November 5th: Dr. Carl DiSalvo, Georgia Tech

Tuesday November 10th: Algorithms and Bias

Thursday November 12th: Participatory AI

**Thursday November 19th:** Christine Gaspar, *Center for Urban Pedagogy*
Our Values, Our Voice, Our Vote
*What Does It Mean To Live In My Own Place?*
Not on our watch!
*CUP goes to the White House*