# LMC 6650 – RW: Project Studio - Designing with Imagined Futures of Technology, Past and Present

Fall 2022
3 Units

## Course Information

**Course Meeting**
Tuesdays 12:30-3:15pm
TSRB 209

**Instructor**
Richmond Wong, PhD
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Georgia Tech
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https://richmondywong.com
he/him/his

**Office Hours**
- Thursdays, 2:30-4:30pm, TSRB 316A or Virtual
- Please try to book a slot in advance on the bookings page and indicate if you prefer to meet in person or virtually. You can also email me to arrange to meet at an alternative time if these times do not work for you.

**Websites**
- Shared Box Folder

**Course Description**
How can we use design to revisit past and current visions of the future, in order to better understand the social and ethical implications of technology? Design futuring approaches—such as speculative design artifacts, design fictions, and corporate concept videos—create artifacts that represent possible futures or possible worlds. However, these tend to be one-off projects and are rarely revisited. But what happens "beyond" the artifact that is presented? What else might exist in these other worlds? Can we build on others' past design futuring projects in useful ways?

In this project studio, we will develop a set of design tactics for engaging with others' visions of the future – which may include extending, critiquing, or re-interpreting these imagined future worlds. We will also explore what these design tactics help us learn about the social and ethical aspects of technology.

We will re-visit and engage with artifacts and imagined worlds from past design futuring projects. These past projects explore a range of issues, including those stemming from new forms of data collection, bodily sensing, artificial intelligence, the internet of things, digital communication & social media, internet infrastructures, and new forms of labor and work.

Furthermore, in forms of positivist research, engaging with prior research results is often done through replication studies. Knowledge production through design research and design futuring doesn't fit into that paradigm – nevertheless, there may be insightful or creative ways to engage with prior design research, so this project studio helps explore what those possibilities might be.

Classes will consist of a mixture of reading discussions, analysis and critiques of existing designs, and hands-on design futuring activities done individually and in small groups. Over the semester students will create a portfolio or "workbook" of design artifacts that respond to past design futuring projects. This class should speak to students interested in design, design research methods, ethics of technology, futures, and fiction.

**Pre-Requisites**
No pre-requisites are required.

**Materials**
There is no required textbook, readings will be linked (journal articles should be available through the Georgia Tech library, but let me know if you have trouble accessing any readings

Students can design using the medium(s) of their choice, which may include but are not limited to writing, sketching, creating digital mockups, or physical prototyping. While the course will not provide design materials, if there are particular material needs you have, please let me know and we can try to work towards a solution.

**Course Objectives and Learning Outcomes**
By the end of this course, students will:
- Understand how design futuring practices such as speculative design and design fiction can be used as research methods and as part of knowledge creation
- Explore social issues of interest to them through design futuring
- Develop a portfolio or "workbook" of designs
- Be able to iteratively create and reflect on designs
- Be able to discuss and use design tactics for engaging prior design futuring projects

More broadly, this course contributes to research developing new methodological perspectives on design futuring practices and techniques.

# Course Schedule, Grading, and Assignments

**Module Format**
The majority of the course will consist of six 2-week modules, each based around an initial theme. A short assignment documenting your design work will be due at the end of each module. Each module will work roughly as follows:

Week 1:
- Readings
  - o 1-2 theoretical readings that gives us ideas or lenses on how we might approach engaging with an imagined speculative world
  - o 1-2 readings of a prior design futuring project
- Assignment

- o Before class, add some design responses to your design workbook with initial ideas inspired by the readings. (The design responses can take any form, but should be done in a way that you can share with the class)
- Class
  - o We will discuss the readings. Students will share their initial design responses and we will discuss the themes arising from them

Week 2:
- Readings
  - o 1 theoretical reading
- Assignment
  - o Before class, iterate on your initial design responses based on the class discussion
  - o Before class, find another existing "speculative" artifact that speaks to the themes of the week to share with the class
  - o After class, submit your design responses along with a short description to the Box folder or Canvas. Submissions will generally be due at the end of day (11:59pm) Thursdays.
- Class
  - o Brief discussion of the reading
  - o Students will share their iterated design responses to be discussed
  - o Students will share the artifacts they found
  - o During class we'll work on creating design responses to student artifacts

## Schedule
Note, changes to the schedule may occur, particularly readings for modules later in the semester. Stay tuned for in-class announcements, Canvas, and email updates.

| Meeting Date | Readings | Class Activities | Assignment |
|---|---|---|---|
| Aug 23 | None | Introductions<br><br>Introduction to Design Futuring<br><br>Discuss student interests | |
| Aug 30 | [**Skim**] Sandjar Kozubaev, Chris Elsden, Noura Howell, Marie Louise Juul Søndergaard, Nick Merrill, Britta Schulte, and Richmond Y Wong. 2020. Expanding Modes of Reflection in Design Futuring. In *CHI'20*, 1–15. https://doi.org/10.1145/3313831.3376526<br><br>Paul Coulton, Joseph Lindley, Miriam Sturdee, and Michael Stead. 2017. Design Fiction as World Building. In *Proceedings of the 3nd Biennial* | Discussion<br><br>Guiding questions for the class: What are different ways to conceptualize the worlds depicted in design | |

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| | *Research Through Design Conference*, 163–179. https://doi.org/10.6084/m9.figshare.4746964<br><br>Richmond Y Wong, Vera Khovanskaya, Sarah E Fox, Nick Merrill, and Phoebe Sengers. 2020. Infrastructural Speculations: Tactics for Designing and Interrogating Lifeworlds. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, 1–15. https://doi.org/10.1145/3313831.3376515<br><br>**[Skim]** William Gaver. 2011. Making spaces: how design workbooks work. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '11).*, 1551–1560. https://doi.org/10.1145/1978942.1979169 | futuring? What are different strategies, tactics, or lenses to explore those futures? | |
| Sep 6<br>**Module 1 – World-Building and Datafied Worlds** | **Theory**<br>Ramia Mazé. 2019. Politics of Designing Visions of the Future. Journal of Futures Studies 23, 3: 23–38. https://doi.org/10.6531/JFS.201903_23(3).0003<br><br>**Artifacts**<br>Barry Brown, et al. 2016. The IKEA Catalogue: Design Fiction in Academic and Industrial Collaborations. In Proceedings of the 19th International Conference on Supporting Group Work (GROUP '16). https://doi.org/10.1145/2957276.2957298<br><br>Michael Skirpan and Casey Fiesler. 2018. Ad Empathy: A Design Fiction. In Proceedings of the 2018 ACM Conference on Supporting Groupwork (GROUP '18). https://doi.org/10.1145/3148330.3149407 | Discuss readings<br><br>Share design responses<br><br>If time, iterate on designs | Before class: initial design reading responses |
| Sep 13 | **Theory**<br>James Pierce. 2021. In Tension with Progression: Grasping the Frictional Tendencies of Speculative, Critical, and other Alternative Designs. In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI '21). https://doi.org/10.1145/3411764.3445406 | Present design responses<br><br>Present student-found artifacts<br><br>Create design responses to student-found artifacts | Before class:<br>1) Iterate on your initial design reading responses;<br>2) Find a new artifact to bring in<br><br>Submit your module response by EoD Thursday |

| Sep 20 Module 2 – Whose Perspectives? | **Theory** Prado, Oliveira (2014) Questioning the "critical" in Speculative & Critical Design. https://medium.com/a-parede/questioning-the-critical-in-speculative-critical-design-5a355cac2ca4 **Theory + Artifacts** Franchesca Spektor, Estefania Rodriguez, Samantha Shorey, and Sarah Fox. 2021. Discarded Labor: Countervisualities for Representing AI Integration in Essential Work. In Designing Interactive Systems Conference 2021 (DIS '21). Association for Computing Machinery, New York, NY, USA, 406–419. https://doi.org/10.1145/3461778.3462089 Sarah Fox, Noura Howell, Richmond Wong, and Franchesca Spektor. 2019. Vivewell: Speculating Near-Future Menstrual Tracking through Current Data Practices. In Proceedings of the 2019 on Designing Interactive Systems Conference (DIS '19). https://doi.org/10.1145/3322276.3323695 | Discuss readings Share design responses If time, iterate on designs | Before class: initial design reading responses |
| Sep 27 | **Theory** Samantha Shorey and Daniela K Rosner. 2019. A Voice of Process: Re-Presencing the Gendered Labor of Apollo Innovation. communication +17, 2: 1–30. https://doi.org/10.7275/yen8-qn18 | Present design responses Present student-found artifacts Create design responses to student-found artifacts | Before class: 1) Iterate on your initial design reading responses; 2) Find a new artifact to bring in Submit your module response by EoD Thursday |
| Oct 4 Module 3 – Historical Visions and Unfinished Worlds | **Theory** Carse, A., and Kneas, D. (2019). Unbuilt and Unfinished. Environment and Society 10, 1, 9-28, https://doi.org/10.3167/ares.2019.100102 **Artifacts (Videos to watch)** AT&T Connections 1993 - https://www.youtube.com/watch?v=yFWCoeZjx8A HP's CoolTown (2000) https://www.youtube.com/watch?v=U2AkkuIVV-I | Discuss readings Share design responses If time, iterate on designs | Before class: initial design reading responses |

| Oct 11 | **Theory**<br>Kenneth Lipartito. 2003. Picturephone and the Information Age: The Social Meaning of Failure. Technology and Culture 44, 1: 50–81. https://www.jstor.org/stable/25148054 | Present design responses<br><br>Present student-found artifacts<br><br>Create design responses to student-found artifacts | Before class: 1) Iterate on your initial design reading responses; 2) Find a new artifact to bring in<br><br>Submit your module response by EoD Thursday |
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| Oct 18<br>**Fall Break** | *No Class* | *No Class* | (October 20) Mid-Course Written Reflection |
| Oct 25<br>**Module 4 – Engaging Fiction and Fandoms** | **Theory**<br>Natalia Samutina (2016) Fan fiction as world-building: transformative reception in crossover writing, Continuum, 30:4, 433-450, DOI: https://doi.org/10.1080/10304312.2016.1141863<br><br>**Artifacts**<br>Richmond Y. Wong, Ellen Van Wyk, and James Pierce. 2017. Real-Fictional Entanglements: Using Science Fiction and Design Fiction to Interrogate Sensing Technologies. In *Proceedings of the 2017 Conference on Designing Interactive Systems (DIS '17).* https://doi.org/10.1145/3064663.3064682<br><br>Casey Fiesler. 2019. Ethical Considerations for Research Involving (Speculative) Public Data. Proc. ACM Hum.-Comput. Interact. 3, GROUP. https://doi.org/10.1145/3370271 | Discuss readings<br><br>Share design responses<br><br>If time, iterate on designs | Before class: initial design reading responses |
| Nov 1 | **Theory**<br>Abigail De Kosnik, "Repertoire Fills the Archive: Race, Sexuality, and Social Justice in Fandom," in Rogue Archives: Digital Cultural Memory and Media Fandom , MIT Press, 2016, pp.161-186. https://ieeexplore.ieee.org/document/7845177 | Present design responses<br><br>Present student-found artifacts<br><br>Create design responses to student-found artifacts | Before class: 1) Iterate on your initial design reading responses; 2) Find a new artifact to bring in<br><br>Submit your module |

| | | | response by EoD Thursday |
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| Nov 8 **Module 5** | **Theory** Noura Howell, Britta F. Schulte, Amy Twigger Holroyd, Rocío Fatás Arana, Sumita Sharma, and Grace Eden. 2021. Calling for a Plurality of Perspectives on Design Futuring: An Un-Manifesto. In Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems (CHI EA '21), 1–10. https://doi.org/10.1145/3411763.3450364 **Artifacts** (To be determined) | Discuss readings Share design responses If time, iterate on designs | Before class: initial design reading responses |
| Nov 15 | **Theory** Phoebe Sengers, Kaiton Williams, and Vera Khovanskaya. 2021. Speculation and the Design of Development. Proc. ACM Hum.-Comput. Interact. 5, CSCW1, Article 121 (April 2021), 27 pages. https://doi.org/10.1145/3449195 | Present design responses Present student-found artifacts Create design responses to student-found artifacts | Before class: 1) Iterate on your initial design reading responses; 2) Find a new artifact to bring in Submit all of your module responses by EoD Thursday |
| Nov 22 **Module 6 – Student Topics** | Student choice – readings and artifacts to be chosen by students, or revisiting themes & designs from earlier in the semester | Discuss readings Share design responses If time, iterate on designs | Before class: initial design reading responses |
| Dec 6 | Student choice – readings and artifacts to be chosen by students, or revisiting themes & designs from earlier in the semester | Present design responses Discussion reflecting on the course overall | Before class: Iterate on your initial design reading responses; Submit your module response by EoD Thursday |

| Finals Week | *No class* | *No class* | Final Written Reflection |
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**Grading**

| Assignment | % of Final Grade |
|---|---|
| **Module Responses -** Submission of design responses and short written description at the end of each module. The top 5 submissions (out of 6) will count towards your final grade (so you can drop or miss 1 with no penalty) | 50% (10% each) |
| **Bringing in an artifact in Modules 1-5** | 5% (1% each) |
| **Mid-Course Written Reflection** | 15% |
| **Final Written Reflection** | 20% |
| **Class Participation** | 10% |

Your final grade will be assigned as a letter grade according to the following scale:

| | | |
|---|---|---|
| A | 90-100% |
| B | 80-89% |
| C | 70-79% |
| D | 60-69% |
| F | 0-59% |

Assignments are due Thursdays by the end of the day (11:59pm) to either Box or Canvas unless otherwise noted. Late submissions lead to automatic grade deductions unless a valid excuse or excused absence is provided and proactively communicated. 1 day late will reduce the grade by 10%, 2 days late will reduce the grade by 20%, etc.

**Brief Assignment Descriptions**

*Module Responses*
Module responses are submissions of your work for each module. Designs should be submitted digitally. Links to an interactive website, scans or photos of physical documents, or photos and videos of physical objects are fine. Your submission should consist of the following:

- Your initial design reading responses
- Your iterations on your design reading responses
- Design responses to students' found artifact
- A brief text description/reflection, up to 500 words, submitted as a PDF.
  - Briefly describe all the designs
  - Optionally, you may wish to briefly write a couple notes addressing the following reflection questions in relation to a couple designs that you particularly like (which will help you for the mid-course and final assignment):
    - What was the purpose or intent behind the design? Did that change over iterations?
    - How does your design relate to the original artifact? What was your approach/lens/tactics to create the designs?

▪ What did you learn or reflect on by creating this design?

Designs can be co-created in small groups if desired. However, all students must submit individual text descriptions/reflections and acknowledge collaborators in their descriptions of the designs.

*Mid-Course Written Reflection*
This is a short paper based on your design work. The organization of the paper is up to you, but it should address the following points
- Document the design process of 2 designs you have created this semester. For each design, address the following questions:
    o Describe the design
    o What was the purpose or intent behind the design? Did that change over iterations?
    o How does your design relate to the original artifact? What was your approach/lens/tactics to create the designs?
    o What did you learn or reflect on by creating this design?
- Reflect on any other themes or ideas that are emerging for you across all the design work and readings you've done so far
- Up to 1500 words (not counting citations or captions)
- Submit as a PDF

*Final Written Reflection*
This is a short paper based on your design work. The organization of the paper is up to you, but it should address the following points
- Document the design process of 2 designs you have created in the second half of this semester. For each design, address the following questions:
    o Describe the design
    o What was the purpose or intent behind the design? Did that change over iterations?
    o How does your design relate to the original artifact? What was your approach/lens/tactics to create the designs?
    o What did you learn or reflect on by creating this design?
- In your work across the whole semester, are there certain approaches/lenses/tactics that you found particularly useful? Why?
- In your work across the whole semester, are there themes or insights that you thought were particularly interesting?
- Were there any challenges you faced or directions you wanted to explore more?
- Any additional reflections you have
- Up to 2500 words (not counting citations or captions)
- Submit as a PDF

# Course Expectations and Guidelines

**COVID-19**
I want to acknowledge that we are still in what can feel like a precarious time. I will strive to create a stimulating learning environment, although there may be uncertainties or complications that arise during the course that will require flexibility and mutual trust. Do not hesitate to contact me if there is anything you would like to discuss at any point during the course. Please communicate with me if a

situation arises that will require flexibility and we can adjust as needed. If you feel ill, please stay home if you feel sick, to protect yourself and others.

For our in-person class meetings, I will be earing a high-quality N/KN-95 mask and have additional masks available should anyone want to use one. The University System of Georgia encourages people to wear masks based on their preference and assessment of personal risk.

**Academic Integrity**
Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards and to follow the Georgia Tech Academic Honor Code.

**Accommodations**
If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at (404)894-2563 or http://disabilityservices.gatech.edu/, as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter.  Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

**Attendance and Participation**
Participation in this class is important so that we can explore and understand the readings together, and to improve our design work. Participation can be done in a variety of ways, including through contributing to discussion, presenting design ideas, providing feedback and critique on others' designs, or working in small groups.

Your attendance is important; however I acknowledge we live in uncertain times. Any absences due to health reasons and personal or family emergencies will be excused. Stay home if you feel sick, to protect yourself and others. Please communicate with me in advance if you will be missing a class. Three unexcused absences are allowed, but additional unexcused absences will lower the student's overall grade by 5%. If you feel that you are falling behind due to an illness, emergency, or other reason, please come see me and we can make a plan for alternate arrangements.

**Student-Faculty Expectations Agreement**
At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. See http://www.catalog.gatech.edu/rules/22/ for an articulation of some basic expectation that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek.

**Statement on Inclusivity and Diversity**
The Ivan Allen College of Liberal Arts supports the Georgia Institute of Technology's commitment to creating a campus free of discrimination on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. We further affirm the importance of cultivating an intellectual climate that allows us to better understand the similarities and differences of those who constitute the Georgia Tech community, as well as the necessity of working against inequalities that may also manifest here as they do in the broader society.

## Additional Resources

If you are experiencing anxiety or depression or a medical, personal, or family crisis, or if you just feel overwhelmed, please do not hesitate to reach out for help. Everybody needs help sometimes, and college can be a personally challenging time. You are not alone, and many of us are available to be sympathetic listeners and to share our own strategies for coping with stressful situations. In addition, professional counselors and medical practitioners have expertise that can be very helpful. The Dean of Students has a list of services (see https://studentlife.gatech.edu/content/get-help-now).