CIXD 6010: Interaction Design for Service
Corcoran School of the Arts & Design, Columbian College of Arts & Sciences
George Washington University
Fall 2019
Tues, 1-5:30p
Flagg Building, Rm. 216, 500 17th St. NW, Washington, DC, 20006

FACULTY
Jae Rhim Lee, Assistant Professor of Interaction Design
Office: Flagg B150-A, 500 17th St. NW, Washington, DC, 20006
E-mail: jrlee@gwu.edu
Office hours: Tues (in office) 11-11:30a, 12:00-12:30p, 5:30-7p, and Thurs (via phone) 5:30-7p
**Select an available appointment here: https://calendly.com/jaerhimlee/at-gw-office-hours

Course Materials, including assignments, are available on Blackboard under the following name:
201903_Interaction Design for Service_CIXD_6010_10

COURSE DESCRIPTION

Interaction Design for Service
Theme for Fall 2019: Re-imagining Fast Fashion

>>What do these examples of high impact social innovation have in common?

Fair trade movement
Charter schools
Emissions trading
Ushahidi (a non-profit tech company that crowdsources data for social activism and public accountability)
Embrace (a low-cost, wearable infant warmer for premature and low-birth weight babies)

>>They disrupt the underlying structure(s) of an EXISTING SYSTEM (ecosystem, industry, etc).
>>They satisfy deeper, UNMET, HUMAN NEEDS.
>>They are feasible and viable actors in the MARKETPLACE.

In this course, you will learn a systems and human-centered approach to design and social innovation that can be applied to any social challenge and/or industry, including the fashion industry, which will be our theme this semester. We will learn about the fashion industry together and approach it as a platform for learning about systems and human-centered design.

You will determine and analyze the structural aspects of fast fashion in order to identify leverage points for change (using Systems Thinking) and uncover the unmet needs of customers, workers, or other stakeholders (using Design Thinking / Human-Centered Design).

In a subsequent course in the second semester of the IxD MA, you will learn how to synthesize this information in order to arrive at novel solutions that will undergo further testing, iteration, validation, and feasibility assessments (using Lean Startup and the Business Model Canvas). Finally, you will build a strategic, stepped
roadmap that includes partners and identifies your/your organization’s focus area in the broader problem space (using Theory of Change mapping).

Course modules will be cumulative rather than discrete units, meaning that each module builds on previous course content. At the end of the term, previous assignments will be combined and used to build the final project. In other words, what you learn about fast fashion in the systems research and analysis in the beginning of the course will inform the design thinking solutions you develop. **This is intentionally designed to break down a large design project into smaller pieces, while teaching you the design process.**

This course is the foundation for the Interaction Design MA. The combination of tools listed above comprises an INTRODUCTION to the FULL STACK DESIGN METHOD, an approach to design and innovation developed by Professor Jae Rhim Lee. You will apply and get greater facility with these tools in the remainder of the IxD Program and in your future work as a designer, problem solver, change maker, and active citizen.

**Rather than merely learning how to develop an app that solves (often superficially) for X, you will learn how to determine what needs to be made FIRST then iterate on that solution to arrive at a more robust response to the problem.**

**LEARNING OUTCOMES**

As a result of taking this course, students will be able to develop novel solutions to social and environmental challenges in the form of interventions, products, experiences, and services using the first and primary components of the Full Stack Design methodology, including:

**SYSTEMS THINKING:**

1) Cultivate a “systems mindset” such that you automatically question and seek to understand the underlying structures and root causes of systems you encounter both everyday and in your design work.

2) Analyze systems to understand the unseen, submerged structures beneath the surface of the “iceberg”. Map various systems dynamics, including flows, feedback loops, behavior changes over time, mental models, interdependencies, leverage points, and emergent activities in a given system. Identify the leverage points in those structures that are potential areas for intervention.

**DESIGN THINKING:**

3) Practice and apply the five stages of design thinking to arrive at innovative solutions to social challenges.

4) Become adept at an iterative design process in which you will test initial hypotheses early and often by producing unrefined, “ugly” prototypes that undergo further testing and revision.

5) Apply mapping techniques (journey mapping, stakeholder mapping, empathy mapping, etc) to synthesize knowledge and gain further insight.

**COURSE PREREQUISITES**

Restricted to graduate students in the Interaction Design MA program and others with permission of the faculty.
## REQUIRED + RECOMMENDED READINGS

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Required/Recommended</th>
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</thead>
<tbody>
<tr>
<td>Meadows, Donella</td>
<td>Thinking in Systems</td>
<td>Required</td>
</tr>
<tr>
<td>Dweck, Carol</td>
<td>Mindset</td>
<td>Recommended</td>
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<tr>
<td>Kelley, Tom</td>
<td>The Art of Innovation</td>
<td>Recommended</td>
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<tr>
<td>Kelley, Tom and David</td>
<td>Creative Confidence</td>
<td>Recommended</td>
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<tr>
<td>Cialdini, Robert</td>
<td>Influence</td>
<td>Recommended</td>
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<tr>
<td>Kahneman, Daniel</td>
<td>Thinking, Fast &amp; Slow</td>
<td>Recommended</td>
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<tr>
<td>Epley, Nicholas</td>
<td>Mindwise</td>
<td>Recommended</td>
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## SCHEDULE

<table>
<thead>
<tr>
<th>CLASS #, DATE</th>
<th>CLASS ACTIVITIES</th>
<th>ASSIGNMENT / READING / WORK IN PROGRESS DUE ON THIS DAY</th>
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</thead>
<tbody>
<tr>
<td>CLASS 1: 8/27</td>
<td>INTRO TO COURSE + SYSTEMS THINKING</td>
<td>1) Read Leyla Arcoglu articles, 2) Read INTRO + CH.1, Thinking in Systems (you will receive copies at Orientation)</td>
</tr>
<tr>
<td>CLASS 2: 9/3</td>
<td>SYSTEMS THINKING, PART 2 + CURATOR TOUR OF FAST FASHION EXHIBIT</td>
<td>READ Ch. 2-4 of Thinking in Systems, Listen to the remaining 4 episodes of Planet Money Makes a T-Shirt + TAKE NOTES (Approx :20 each), Develop + Be prepared to present your research plan to the group.</td>
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<tr>
<td>CLASS 3: 9/10</td>
<td>SYSTEMS THINKING</td>
<td>READ Ch. 5-7 of Thinking in Systems, Update research in progress to group</td>
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<td>CLASS 4: 9/17</td>
<td>SYSTEMS THINKING</td>
<td>SYSTEMS RESEARCH PRESENTATIONS (GRADED)</td>
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<tr>
<td>CLASS 5: 9/24</td>
<td>SYSTEMS THINKING</td>
<td>PRESENT EARLY DRAFTS OF SYSTEMS MAPS FOR FEEDBACK</td>
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<td>(SAT, 9/28)</td>
<td>REQUIRED: SUSTAINABLE FASHION CONFERENCE @Corcoran, Flagg Building, <a href="https://museum.gwu.edu/unveiling-fashion-conference">https://museum.gwu.edu/unveiling-fashion-conference</a></td>
<td>N/A – TAKE NOTES TO HELP UPDATE YOUR SYSTEMS MAPS</td>
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<tr>
<td>CLASS 6: 10/1</td>
<td>INTERIM SYSTEMS PRESENTATIONS + DANIEL SILVERSTEIN TALK + CLASS VISIT / FEEDBACK ON SYSTEMS WORK (<a href="http://www.zerowastedaniel.com">www.zerowastedaniel.com</a>)</td>
<td>DRAFT 2: SYSTEMS THINKING PRESENTATION</td>
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<tr>
<td>CLASS #, DATE</td>
<td>CLASS ACTIVITIES</td>
<td>ASSIGNMENT / READING / WORK IN PROGRESS DUE ON THIS DAY</td>
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<td>CLASS 7: 10/8</td>
<td>SYSTEMS MAPPING PRESENTATIONS + DESIGN THINKING WARMUP BOOTCAMP</td>
<td>FINAL SYSTEMS THINKING PRESENTATIONS (GRADED)</td>
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<tr>
<td>CLASS 8: 10/15</td>
<td>DESIGN THINKING SPRINT PART 1 (EMPATHY)</td>
<td>N/A</td>
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<tr>
<td>(SAT, 10/19)</td>
<td>OPTIONAL: CORCORAN COSTUME BALL</td>
<td>N/A</td>
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<tr>
<td>(TUE, 10/22)</td>
<td>FALL BREAK: NO CLASS</td>
<td>N/A</td>
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<tr>
<td>CLASS 9: 10/29</td>
<td>DESIGN THINKING SPRINT PART 2 (DEFINE)</td>
<td>COMPLETE 5 SOLID INTERVIEWS. YOU WILL NEED TO DO MORE THAN 5 TO GET 5 GOOD ONES!</td>
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<tr>
<td>CLASS 10: 11/5</td>
<td>DESIGN THINKING SPRINT PART 3 (IDEATE + PROTOTYPE + TESTING)</td>
<td>5 COMPLETED EMPATHY MAPS PER GROUP FROM 5 INTERVIEWS</td>
</tr>
<tr>
<td>CLASS 11: 11/12</td>
<td>EQUITY DESIGN WORKSHOP with CREATIVE REACTION LAB (STAY FOR NETWORKING AFTER THE WORKSHOP, 5:00-6:30P++)</td>
<td>(WORK ON PROTOTYPES)</td>
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<tr>
<td>CLASS 12: 11/19</td>
<td>DESIGN THINKING SPRINT PART 4 (ITERATE)</td>
<td>UGLY PROTOTYPES COMPETITION PRESENTATIONS (GRADED)</td>
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<tr>
<td>CLASS 13: 11/26</td>
<td>DESIGN THINKING FINAL PRESENTATIONS + BRINGING IT ALL TOGETHER</td>
<td>DESIGN THINKING FINAL PRESENTATIONS (GRADED)</td>
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<tr>
<td>CLASS 14: 12/3</td>
<td>STUDIO WORK (FINAL CLASS MEETING)</td>
<td>SHARE WORK IN PROGRESS FOR FEEDBACK TBD</td>
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<tr>
<td>12/10</td>
<td>FINAL PRESENTATIONS, RM 216</td>
<td>SUBMIT PORTFOLIO-READY PDF OF FINAL PRESENTATIONS (GRADED)</td>
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**GRADING**

*Assignment descriptions and guidelines will be posted on Blackboard.*

SYSTEMS THINKING (25%)
- Systems Research Presentation (10%)
- Systems Thinking Final Presentation (15%)

DESIGN THINKING (25%)
- Ugly Prototypes Competition / Presentation (10%)
- Design Thinking Final Presentation (15%)

FINAL PRESENTATION (25%)
PARTICIPATION (25%)

Participation is weighted heavily in the grading because your high engagement will contribute greatly to the quality of your learning experience in this class and your capacity for future design work.

How is participation measured? Participate in classroom discussions and/or contribute to the discussion section of Blackboard. Ask questions, reflect on the course material, share tips and resources with your classmates, give course feedback so that we can make adjustments in real time. Some of you will be more comfortable contributing on-line, and some of you will be more comfortable contributing in class discussions. You will ideally contribute via both formats, but know that both forms of contribution will be noted and valued. Finally, be open to feedback from your peers, instructors, users, and class visitors. Use and apply feedback constructively.

REMEMBER: FEEDBACK IS A GIFT!

Note: For assignments that involve group work/collaboration, grades will reflect not only the quality of the final product or presentation, but also your individual contribution AND effort to promote positive and productive teamwork. As such, individual members of a team may receive different grades.

TIME COMMITMENT
Students will receive 4.5 hours per week of direct instruction with the exception of University holidays. In addition, students are expected to spend a MINIMUM of 5 hours per week for independent learning (readings, assignments, etc.)

ATTENDANCE POLICY
Classes meet once a week for 14 weeks. This means that missing even one class impacts your learning and coursework as you will miss critical and foundational skills in the Interaction Design MA program. Our policy is that students may miss one class as an "Excused" absence - meaning that advance notice is given, or a doctor's note is provided to the faculty. For each Unexcused class absence, your grade will automatically be dropped by a full letter grade. This means an A- is automatically a B-.
LETTER GRADE DESCRIPTIONS

A   Excellent: Exceptional work for a graduate student. Work at this level is unusually creative, thorough, well-reasoned, methodologically sophisticated, and well-formed. Work is of professional quality.
A-  Very high quality work: Very strong work for a graduate student. Shows high level of creativity and a strong understanding of relevant methodological approaches, is thorough and carefully constructed, and meets professional standards.
B+  Good: Sound work for a graduate student; without serious shortcomings. This grade indicates the student has fully accomplished the course objectives.
B   Adequate: Competent work for a graduate student with some evident weaknesses. Demonstrates competency in the key course objectives but the understanding or application of some important issues or techniques is less than complete.
B-  Weak: Work meets minimal expectations in the course but has serious shortcomings for a graduate student.
C   Not satisfactory: Work is complete, but is below the level of expectation for the graduate level.
D   Extremely Poor Work: Work has major shortcomings and mistakes.
F   Insufficient Work: Work has profound shortcomings, glaring errors, or is insufficiently complete.
I   Incomplete

UNIVERSITY POLICIES

University policy on observance of religious holidays
In accordance with University policy, students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance. For details and policy, see: students.gwu.edu/accommodations-religious-holidays.

Academic integrity code
Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information. For details and complete code, see: studentconduct.gwu.edu/code-academic-integrity

Safety and security
In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.

SUPPORT FOR STUDENTS OUTSIDE THE CLASSROOM

Disability Support Services (DSS)
Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Rome Hall, Suite 102, to establish eligibility and to coordinate reasonable accommodations. For additional information see: disabilitysupport.gwu.edu/

Mental Health Services 202-994-5300
The University’s Mental Health Services offers 24/7 assistance and referral to address students’ personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations confidential assessment, counseling services (individual and small group), and referrals. For additional information see: counselingcenter.gwu.edu/