

IAHIS-1190

Design Thinking & Research

Course description

“There is growing evidence to suggest that design-centric companies outperform their peers. By employing such design tools as empathy, creativity, and rationality, we are able to re-frame problems in ways that forge new pathways toward innovative solutions.”

– Jeneanne Rae of Motiv Strategies, for the Design Management Institute.

Welcome to Design Thinking and Research, an introductory course that will provide you with the mindset and methods necessary for solving difficult, multi-dimensional problems. Design has the power to change people’s lives. By looking, listening, and questioning you can learn a lot about how people interact with each other, with products, services, and environments. The insights you gather through observations and interviews can be used to define opportunities and envision possibilities. Design thinking provides a research framework and set of methods to listen deeply, generate actionable insights, and design responsive and appropriate solutions to problems in almost any field.

In this course, students will learn about Design Thinking and related methods by example, through discussion, and most importantly by doing. At the end of this course, students will be ready to apply Design Thinking and Research methodologies to their own projects and in collaboration with others.

Course objectives

In this course, students will learn how to:

- Develop an understanding of Design as a broad discipline and way of thinking that can be applied to numerous specializations; not simply to the production of various artifacts but as a general method of planning and innovation that can be applied to any field.
- Become familiar with various types of research used for design projects, and the more general definitions of kinds of research (such as quantitative/qualitative; primary/secondary; formative/summative).

Spring 2019

Tuesdays, 1:15 – 3:45 pm
University Hall, Room 2-078
3 credits

Course instructors

Lisa Spitz

lsplitz@lesley.edu

617-349-8041 (office)

617-438-8184 (cell)

Adam Gamwell

agamwell@lesley.edu

832-525-2097 (cell)

Office hours

Text, email, or call your course instructor for an appointment.

- Choose appropriate research methods for specific kinds of design problems, and recognize when more sophisticated research and collaborations are called for (use of user experts; contextual research; co-design; user testing; etc.).
- Use methods and practices of designers to iteratively frame problems as opportunities, ideate potential solutions, and create & evaluate prototypes.
- Apply Design Thinking and Research vocabulary to reflections of their own work.
- Document research and design processes and develop presentation skills.

Design challenge

Design Thinking is built on a Human Centered mindset, meaning the experience and wellbeing of people, sometimes called 'users' or 'stakeholders' is paramount to problem definition and solution finding. The design challenges in this class will draw from values like Inclusive and Participatory design, which we will define in class. You will also orient your design challenges towards a group of people that is different from you and your peers (i.e. different generations, class, abilities, language speakers). The purpose of this is to have students understand how to apply design thinking and research in unfamiliar scenarios. This will challenge often unconscious assumptions and biases, and as such the classroom will be run as a safe space where we can explore differences with patience, respect, and open minds. **See Blackboard for this semester's design challenges.**

Course structure

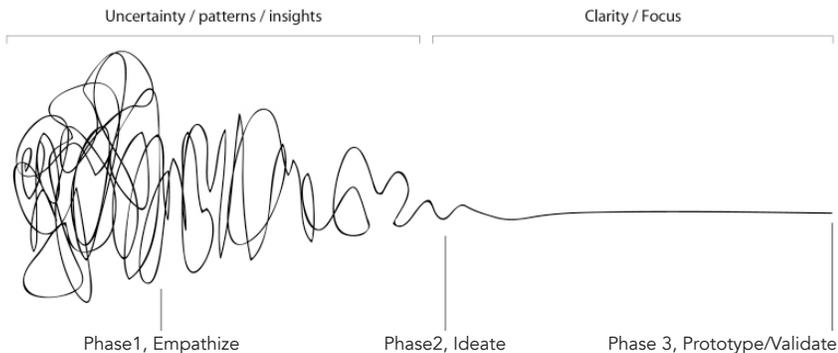
Collaboration is an important part of being a professional, and an especially important component of design thinking. As such, you'll be working collaboratively on assigned project teams for the remainder of the semester. Teams formation will be determined based on your own self-identified interests and skill sets. You will be relying upon one another to create a culture of innovation which challenges assumptions, embraces difference, and encourages active communication. I encourage you to get to know your team members and develop a routine that works best for each of you.

As a team, your task will be to design a new product, service, environment, or experience that enhances stakeholders' lives on a day to day basis. To accomplish this, we will move through the methods of design thinking, crafting solvable research problems, learned from real people. In other words, your design projects will be crafted in consultation with real people who will help you define the parameters of who you are designing for and whether your service or experience is likely to be appropriate.

*"Design Thinking = a method,
not magic"*

— William Burnett, Stanford University

Our course is divided into 3 Phases:



The Design Process – diagrammed by Damien Newman from Central Office of Design

Phase 0 – Introduction to Design Thinking (1 week)

In our first week of class, you'll participate in an activity designed to introduce you to the Design Thinking process. By the end of class, you should have an idea of what the semester will look like and which design challenge you might be working on.

Phase 1 – Empathize (5 weeks)

Phase one is about conducting research and making sense of data. Your goal, as a team, is to get to know a group of people and problems that were previously unfamiliar to you. At the end of this phase, your team is expected to demonstrate empathy for people and insights around problems individuals face, as it relates to your chosen project area. **Your phase one presentation is tentatively scheduled for Tuesday, February 26th.** In this presentation, your team will share 2-3 user personas that are a reflection of your research and data analysis.

Phase 2 – Ideate (4 weeks)

In Phase two, you'll use your insights about people to ask "what if" questions that will fuel your ideation process. During this phase, teams are expected to brainstorm, categorize, compare and evaluate upwards of 100 ideas all aimed at solving your Personas' biggest problems. **Your phase two presentation is tentatively scheduled for Tuesday, April 2nd.** In this presentation, your team will share 3-6 sketches of new product concepts along with justification for why they are the "right" solutions for the problems your personas face.

Phase 3 – Prototype / Validate (4 weeks)

Phase 3 is about envisioning possibilities through design and rapid prototyping. Teams should demonstrate a bias towards action as they attempt to bring their new product concepts to life, test with users, and

Assigned reading

There is no required book for this class. However, web links and TED Talks will be assigned as important background information. This content will not be presented in detail during class. You are expected to do all reading beforehand and come to class prepared to work in teams. The readings and videos provide important background knowledge, tools, and insights to apply and iterate upon during our work in class

iterate based on feedback. **Your phase three presentation is scheduled for Tuesday, April 30th, our last day of class.** In this final presentation, teams are expected to present their final product concept, demonstrate how it would be used, and articulate why it's the ideal solution to the needs uncovered in Phase one.

Grading

At the end of each phase, two things will happen:

1. Your group will present your process and outcomes to the class; and
2. You will write a personal reflection.

Since this class is largely focused on process, you are expected to capture your daily and weekly progress. You will be provided with a space within Microsoft Teams to capture and record your project documentation. **Take pictures of everything your team does and produces!** (Trust us, this will make reflecting and presenting on your process much, much easier).

Expectations

Despite being presented linearly, the design process is messy.

To be successful, you will need to:

- Challenge assumptions
- Get out of your comfort zone
- Try something new
- Ask questions
- Keep an open mind
- Be respectful
- Embrace ambiguity
- Work collaboratively
- Think broadly
- Be objective

Blackboard and Microsoft Teams will be your go-to resources for this class. The course schedule, readings, homework assignments and announcements will be posted weekly via Blackboard. You will also be invited to a Teams channel, which will provide a space for ongoing communication and team specific collaboration.

Grade breakdown

15% Attendance

20% Phase 1 Team Presentation
5% Phase 1 Individual Reflection

20% Phase 2 Team Presentation
5% Phase 2 Individual Reflection

30% Phase 3 Team Presentation
5% Phase 3 Individual Reflection

= 100%

Grading policy

- A. Exceptional work in all aspects.
- B. Above average work, distinguished in certain but not all aspects.
- C. Average and/or unexceptional work. Lowest passing grade.
- D. Below average work.
- F. Failing work. No credit.

Note that poor attendance, or excessive lateness, or late assignments may negatively affect your grade beyond the weighting listed above.

Course conduct

Learning is not a passive experience! You are part of a project team. You will all be relying on one another to be successful this semester. Engage with your team's process and contribute equally. Internet use unrelated to coursework and texting in class will not be tolerated.

Attendance Policy

Regular attendance in class is required. Students are expected to arrive on time and remain in class for the entire period scheduled. The responsibility for work missed due to any type of absence rests with the student. A failing grade may be assigned to any student who attends less than 80% of class meetings (3 classes of a course meeting once per week or 6 classes of a course meeting twice weekly). Any exceptions are made at the discretion of the instructor.

Attendance is taken during every class period. Do not make prior commitments that require you to miss class or leave class early (i.e. doctor or dentist appointments, family weddings, car appointments, etc) unless absolutely necessary. Personal commitments should be scheduled on your personal time, not class time.

If you know that you will have to miss a class, ask a classmate to bring in your work and check Blackboard for that week's assignment — you will be expected to have completed your work upon your return to class. I strongly recommend "saving up" absences for any unexpected emergencies for genuine need. Review the attendance policy on the left.

Chronic lateness will lower your course grade. Leaving class early (15 minutes), or arriving late (15 minutes) counts as a half (50%) absence. Coming to class with no work is marked as a half (50%) absence.

Learning Community Statement

Faculty, staff and students are all responsible for advancing a campus and classroom climate that creates and values a diversity of ideas, perspectives, experiences and identities. As such, we aspire to engage together in a community where each person is respected and empowered to express themselves and be heard.

We commit to creating an environment and developing course content that recognizes the learning experience of every student with dignity and respect, regardless of differences that include, but are not limited to: race, socio-economic status, ethnicity, indigenous background, immigration status, nationality, gender identity/expression, language, abilities and accommodations, religion/spirituality, sexual orientation, veteran status or membership in uniformed services, political views, age and physical appearance.

Attendance policy

- Attendance is mandatory.
- More than 3 absences = failure for the course
- Leaving class early (15 minutes), or arriving late (15 minutes) counts as a half (50%) absence.
- Coming to class with no work is marked as a half (50%) absence.

Design department matriculation policy

All students in a B.F.A., Diploma, or Certificate Program in Design are required to receive a C- or higher in Design Sequence courses. Design students receiving a D+ or lower will need to repeat this course (or pass an additional design elective) if they wish to matriculate in the Design program.

Mission Statement

Lesley University's Mission Statement states that "...Lesley prepares socially responsible graduates with the knowledge, skills, understanding and ethical judgment to be catalysts shaping a more just, humane, and sustainable world." Among many experts in the field, Diane Goodman has described the following competencies: (1) Building self-awareness, (2) Understanding and valuing others, (3) Knowledge of societal inequities, (4) Interacting effectively with a diversity of people in different contexts, and (5) Fostering equity and inclusion. Our mission and these competencies are embedded in our curricula and our classrooms. They provide a foundation for transformative teaching and learning, and approaches to social justice.

Lesley Art + Design Critique Culture Statement

Critique is a conversation about the content and context of the work you make, as well as the development, process, and final form your work takes. It's not a personal critique about you as an individual. Critique can be an intense process to engage in whether you are presenting work or are participating in the conversation. As a student, it is important to realize that feedback comes from many different voices and perspectives and may conflict and contradict itself. This is true for the positive and the negative, but it is important to not take it personally or constantly be on the defensive. Critique is a vital part of the creative process. It is a communication skill that needs to be learned and practiced the same as any technical skill or mastery of medium and materials. Critique extends beyond the art and design school environment to professional and personal studio practices. It is an essential part of the process of making and evaluating your work. Participation in the process is necessary for it to be valuable.

Library Services

The Library Research Portal (research.lesley.edu) provides access to multiple services and authoritative resources for academic research including books, articles, tests, visual media, and teaching resources. The Lesley University Library encourages students and faculty to use these academic resources for their assignments:

- [Our Ask-A-Librarian](#) page lets you chat, text, call, e-mail, or request a meeting with a librarian!
- Visit our two libraries for drop-in help, course reserves, computers/wifi, printing, new magazines and journals, and (of course) books!
Sherrill Library (main library), Brattle Campus, 617-349-8850
Moriarty Library (arts library), Porter Campus, 617-349-8070

Supplies

- Black sharpies: one thick, one thin
- Stickies / post-it notes
- Digital camera or smart phone with camera (for recording daily/ weekly process)
- Pocket folder or three-ring binder (for handouts)
- Lesley email account (used for all class communication)

Academic Dishonesty

Academic dishonesty comes in many forms. The following list is not meant to be exhaustive and a student may be charged and found guilty of violating the University's Academic Integrity Policy for an offense not enumerated below. Academic dishonesty includes: cheating, plagiarism, fabrication and falsification, multiple submissions, abuse of academic materials, complicity/unauthorized assistance, lying/tampering/theft. Please review the student handbook for details: <http://www.lesley.edu/academic-integrity-policy/>

Disability Statement

Lesley University is committed to ensuring that all qualified students with disabilities are afforded an equal opportunity to participate in and to benefit from its programs and services. To receive accommodations, a student must have a documented disability as defined by Section 504 of the Rehabilitation Act of 1973 and the ADA Amendments Act of 2008, and must provide documentation of the disability. Eligibility for reasonable accommodations will be based on the documentation provided.

If you are a student with a documented disability, or feel that you may have a disability, please contact the appropriate disability administrator:

For Students with Learning Disabilities, Attention

Disorders and Asperger Syndrome:

Kimberly J. Johnson

Director LD/ADD Academic Support Program

Doble Hall, 2nd floor

Phone: 617-349-8462, Fax: 617-349-8324, kjohnso7@lesley.edu

For Students with Physical, Sensory, and Psychiatric

Disabilities:

Daniel Newman

Director of CAA (ADA/504 Coordinator)

Doble Hall, 2nd Floor

Phone: 617-349-8572, Fax: 617-349-8324, dnewman@lesley.edu

The contact persons play the role of facilitator between the student's needs, faculty requirements, and administrative guidelines of the University. Disability-related information is not shared without the permission of the student.

Back up your work

Back up your work weekly using OneDrive (available through your Lesley account), Dropbox, Google drive, your own backup drive, etc.

Data loss – from a lost, fried and/or stolen hard drive, dead laptop, or malware – cannot be used as an excuse for late or missing work.

You are responsible for the re-creation of any projects that are lost or missing.

Equal Opportunity and Inclusion Policy

Lesley University remains committed to a policy of equal opportunity, affirmative action, and inclusion for all current and prospective faculty, students, and staff and to eliminating discrimination when it occurs. Lesley University does not discriminate on the basis of race, color, religion, sex, national origin, age, veteran status, disability, or sexual orientation in admission to, access to, treatment in, or employment in its programs and activities. Lesley will not ignore any form of discrimination, harassment, or sexual harassment by any member of the Lesley community. Moreover, Lesley does not condone any form of retaliation against any person who brings a complaint of discrimination, harassment or sexual harassment or against anyone who cooperates in a complaint investigation. For more information, visit <https://lesley.edu/students/policies/equal-opportunity-and-inclusion-policy> or contact Dr. Nathaniel Mays, Dean of Student Life and Interim Title IX Coordinator, 617-349-8539 and equalopportunity@lesley.edu