University of Texas at Arlington
School of Architecture
Interior Design Program

Syllabus INTD 4394, Design Thinking Lab

Spring Semester 2016
Name of instructor: Norma I Figueroa, BA, MArch, PhD
Office Number: Arch 323
Phone: 817-272-2801, leave a message
Email address: norma@uta.edu
Faculty profile: https://www.uta.edu/mentis/public/#profile/profile/view/id/6173
Office hours: before and after class, and by appointment.

INTD 4394, Section 1
Time and Place: Tuesday and Thursday, 9:30-10:50 am, Arch 304

Course description:
This research course applies Design Thinking Methodology to everyday problems in order to create human-centered innovations. Envisioned as a collaborative lab, it fosters the integration of research, problem-forming and problem-solving, aesthetics, technology, prototyping, and publishing, with a strong focus on user's needs. It will address design needs through research on end users, creating a human-centric point of view as a guide. It will drive students to experiment with ideas, to analyze case studies and to build rapid prototypes, in order to test and communicate the proposed product. The aim is to have students finish the course with a completed object or space, designed to better the quality of life of a particular group of the population.

Academic Outcomes:
Upon completion of this course, the student will be able to:
- Apply Design Thinking methodology to solve problems.
- Develop problem identification skills so as to respond to user needs with appropriate and creative solutions.
- Form and ask process questions in order to approach a particular problem.
- Use analytical, critical and creative thinking in order to transform ideas into visuals and prototypes.
- Envision and act out user scenarios of an object.
- Have a notion on what it takes to create simple and minimal human centered products.
- The applications of rapid prototyping.
- Have an understanding of how to publish research done.

Projects as Service-Learning:
This course would not be successful without a link to the community it is situated. Its emphasis in human-centered design requires students to research and interview users in order to create innovative solutions to the user's problems. At the beginning of the semesters, students will be asked to identify a need to better the quality of life of someone near to them, either at home, school or work, so that the student is familiar with the problem. With the information gathered from the user regarding their needs, and through the analysis of similar case studies, the students will proceed to design an object to be prototyped and tested. Students will work with the needs of the community they identify as potential users not only by interviewing them, but also by including

them in the design and testing phases, with the aim of creating an object they need to better the quality of their lives. Projects will be the result of collaboration between the community and the students, and between the students themselves. Work will be published on the Web through a class' blog.

Suggested textbooks:
Change by Design, Tim Brown
Understanding Design Thinking, Hasso Plattner
Human-centered Design Tool Kit, IDEO
Emotional Design: Why we love or hate everyday things, Donald Norman
Designing for Social Change, Andrew Shea
Cradle to Cradle, Michael Braungart
Interviewing Users, Steve Portical

Assignments, projects and deadlines:
The fifteen weeks of the semester will be allocated to three projects. Since the projects will vary in size and complexity, the duration will vary accordingly, and so will its percentage in the final grade. A tentative schedule is provided.
The students are expected to collect literature on Design Thinking and make a presentation to class of books or articles they find relevant.
All projects are to be completed by the student and for this specific course. Prior coursework will not be accepted. Projects will be submitted both in hard and soft copies after the completion of each project. No projects will be accepted after the required date of submission of the last semester project.

Course Format:
The class will utilize a variety of pedagogical techniques including lectures, reading and field research, hands-on work, participation in student's competitions, presentation and critiques of student's work as well as work made by other designers.

Attendance Policy:
Class attendance is compulsory. Late arrivals and early departures do not constitute complete attendance. Students are expected to work throughout the class on the current assignment. Attendance to all reviews and juries is mandatory. More than three unexcused absences for the semester will result in lowering your class average by one letter grade. Subsequent unexcused absences will continue to lower your class average.

Course requirements:
- Attendance in class, for the entire class session, and for pin ups and reviews is required.
- Complete assignments are due on time. Late projects will be penalized by lowering a whole grade per day. No late work or project extensions will be granted because of absences.
- Participation in class field trips and site visits is required.
- Participation in group reviews and juries, class discussions, engagement in asking and answering questions, and an active part in pin ups and critiques are required.
- Daily submission of work to class for discussion and to receive feedback is expected.

Class rules:
- Be prepared to work during class time
- No cell phone use and no texting during class
- No TV-movie watching during class
- Computer monitors must be turned off during lectures
- Class absences must be submitted in writing

Prerequisite:
Completion of all freshman and sophomore Architectural Core curricula, or permission by the instructor.

Evaluation:
Evaluation for the course will be based upon understanding and implementation of design principles, evidence of analytical and creative process, research ability, comprehensiveness of design solution, quality and craftsmanship of drawings, and effectiveness of verbal presentation. The preparedness of the student for reading, discussions, desk critiques and pin ups will also be evaluated. All projects will be evaluated taking into consideration the process and the final product, as well as the delivery of the project at its due date. Late submissions will receive a lower grade.

The process will comprise 50% of the project's grade. Process is your way of working in and out of class and the investigative process undertaken for each project. The evidence of your studio process will be evaluated in every class session.

To be able to achieve a high percentage in the process portion of the grade, the student should:
- Produce a daily consistent amount of work dedicated to the specific project.
- Come to class prepared for desk critiques and reviews with the requested materials.
- Show evidence of critical thought.
- Show evidence of experimentation and risk taking.
- Show evidence of research and analysis; achieving the necessary investigation and documentation of the projects parameters.

Delivering a complete project will comprise the remaining 50% of the project. For this section, the breakdown* is as follows:
- 20% Conceptual Design: the creative response to the project statement, and clarity of design intent are evaluated. This is the theoretical or interpretive basis of the project.
- 30% Design Solution: Does the project work? How? A functional and programmatic solution of the project objectives should be clearly expressed.

*The breakdown of the 50% of the project, as well as the 50-50 ratio shown above might change according to the importance of the components in a particular project. The students will get a notice in case changes are made.
If the student has any doubts regarding the requirements for this class, it is the student's responsibility to ask in class or schedule an appointment with the instructor. The student is encouraged to keep track of grades in order to verify that assignments are posted correctly. Any discrepancy should be brought up to attention right away. Tracking scores also helps in being aware of the grade that the student will probably get at the end of the semester. Grades will not be "curved."

Percent of Points	Grade
90-100, Excellent	A
80-89, Good	B
70-79, Average	C
60-69, Below Average	D
Below 60, Failure	F

Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels.

Expectations for Out-of-Class Study: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for reviews, etc.

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/aao/fao/).

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAAA),* and *Section 504 of the Rehabilitation Act.* All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the Office for Students with Disabilities (OSD). Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:
The Office for Students with Disabilities, (OSD) www.uta.edu/disability or calling 817-272-3364.
Counseling and Psychological Services, (CAPS)   www.uta.edu/caps/ or calling 817-272-3671.

Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Title IX: *The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos. For information regarding Title IX, visit* www.uta.edu/titleIX.

Academic Integrity: Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.
I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will

be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located [insert a description of the nearest exit/emergency exit]. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at http://www.uta.edu/universitycollege/resources/index.php

Librarian to Contact:
Mitch Stepanovich, Architecture and Fine Arts Library, 817-272-7518, stepanovich@uta.edu

Schedule INTD 4394

Tentative schedule; the exact due dates will be announced during the semester.

DATE	PROJECT
Week 1	Introduction to Design Thinking and the start of Project I
Week 2	Individual presentations.
Week 3	Project development
Week 4	Review of Project I and start of Project II.
Week 5-6	Analysis, research, preliminary and concept studies.
Week 8-10	Project development.
Week 11	Review of Project II and research on publication.
Week 12	Start of Project III*: TBA
Week 13	Analysis, research, preliminary and concept studies Project development
Week 14	Project development
Week 15	Review of Project III .

Note: *As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled. The students will be advised in a timely* manner. –Norma Isa Figueroa.*
* The definition of "timely" is left to the discretion of the instructor.