**Course Description**

This combination survey/seminar course is designed to help students enrolled in their first semester of study in the CVAD, Department of Design graduate program “MA in Design with a Concentration in Interaction Design” achieve the following, learning-based goals:

01 | ensure that they come to broadly understand how and why interaction design approaches and methods have evolved to yield the diversifying scope of interactive experiences available to contemporary user groups, and how these will affect the future of a wide variety of social, technological, public policy, environmental and economic initiatives;

02 | ensure that they learn how and why interaction design is situated at the nexus of the internet, human computer interaction (HCI), visual communication/storytelling, and the operation of knowledge- and service-based initiatives fueled by a wide variety of socio-economic needs and aspirations;

03 | ensure that they come to understand that effective interaction design processes are guided by ongoing epistemological and ontological inquiry;

04 | ensure that they understand that effective interaction design processes must account for ever-changing meso-, macro- and micro-level technologies and technological infrastructures, business models, social constructs, political initiatives, and environmental changes.

**Prerequisites (for MA in Des w/ Concentration in IXD students):**

Admittance into the MA in Design with a concentration in IXD program; (for Com Sci, Tech Comm, Anthropology, Journalism, Marketing and Logistics, ITDS and Sociology students): permission of the instructor.

**Course Objectives**

Through the completion of course assignments, students will acquire competency in the following areas:

- learning to formulate and operate data gathering processes that allow them to analyze data gleaned from etic and emic field research methods so they can cultivate understandings about the relationships between particular groups and the interactive systems they use (etic approaches are operationalized outside a given social group, from the perspective of an observer; emic approaches are operationalized from within a given social group)

**Materials**

In addition to weekly readings from your course textbooks, other reading material will be posted as PDFs or MS Word documents in the Readings folder on the Blackboard-facilitated course website. You should bring a sketchbook (roughly 9” x 12” in size), and a dark pen(s), pencil(s), or other sketching tool(s) you’re comfortable using (e.g., an iPad or other form of digitechnically enhanced rendering tablet).

**Required Texts**


**Recommended Texts**

the following foundational approaches and methods necessary to frame and strategically plan interactive experiences that prove to be useful, usable and desirable for specific user groups: the ability to accurately assess human factors, socio-cultural perceptions and levels and types of cognition

- the analytical and evaluative capacities necessary to assess the relative efficacies (re: usability testing and data processing/management performance) of extant interactive systems and experiences

Through the completion of course assignments, students will develop competency in the following areas:

- the ability to strategically plan and operationalize failure analysis processes and protocols to assess the design and functionality of various interactive systems
- the skills and understandings necessary to effectively identify interactive situations that are somehow problematic for particular groups
- the skills and understandings necessary to effectively account for and then analyze how and why a diverse array of contextualizing factors, conditions and behaviors cause or contribute to “what it is” that causes a given interactive situation to be problematic for a specific group
- the capacity to iteratively develop multiple, inventive and/or innovative approaches to re-thinking and re-making a given interactive situation so that it becomes less problematic for a specific group
- the aptitudes and capabilities necessary to effectively document their working processes, so that they emerge from this learning experience with a variety of means to showcase and, if necessary, “pitch” what they will have developed to potential collaborators, private investors and public funding agencies

**Course Structure**

This course is offered in a design studiolab format, and will meet for one, 170-minute class sessions per week. Course content and studiolab etiquette during critically dialectic exchanges between fellow-students and students and faculty are all consistent with the requirements of pursuing a career in professional User Experience and Interaction Design environments.

Under the guidance of the instructor, students will spend approximately the first half of the semester engaging in a succession of week- to two-week-long learning experiences that build their understandings of how and why particular approaches to designing for interactivity have evolved as they have, and how these have affected the development of specific types of affordances and signifiers. Some of these learning experiences will be informed by students’ critical examinations of scholarly articles, combined with assigned readings from their course textbooks, as well as simple-yet-informative (and carefully chosen) blog posts or other online pieces, and case studies.

The second half of the semester will challenge students to operationalize what they will have learned during their enrollment in the first portion of the to guide the development of proposals—in the forms of prototypes—for new kinds of interactive experiences that facilitate the acquisition of knowledge and the delivery or transaction of services. The week-to-week structure of this course is designed to allow students to successively construct knowledge that they can then use to inform their design decision-making as the semester progresses.

Students will work in the studiolab as required, and participate in class discussions and critical dialogues during class hours and as they engage in assigned work outside of class. Students will submit their work on assigned course projects for critical discussion in iterative phases as stipulated by a per-project development schedule provided to them by the instructor.
The CVAD Computer Lab, the computing facilities in room 121 of the New College, and the Design Research Collaborative in Dallas are available (during their respective hours of operation) to students to work on assigned course projects outside of scheduled class time.

**Evaluation/Grading**
Each assigned project will be worth a specific number of total course points to individual students or students working in design teams. Each assigned project will be evaluated according to criteria articulated to all students on the day it is launched. How effectively each student/student team is assessed to have addressed specific project criteria will be recorded on an assessment document that each student will receive one to two weeks after the culmination of each project. The per-project course points each student earns as the semester progresses will be added together at the end of the semester to determine that student's final course grade. A final project and final project presentation must be completed by the final class-meeting date and time for this course. There is no final exam for this course.

**Primary Course Project** (68 course points):
**Improving Technology to Enhance/Positively Augment Your Personal Relationships**
A semester-long, individual-project experience that will yield the presentation of a medium-fidelity prototype by December 11.

The 68 possible course points available toward the completion of this project will be awarded based on an evaluation of the following:
- the presentation of and dialogue surrounding the low-fidelity prototype (15 points);
- the presentation of and dialogue surrounding the mid-fidelity prototype (15 points);
- assessments of other weekly assignments (4 points each x 8 = 32 points);
- the final presentation (December 11; 6 points)

Please note: as 1) our class size is relatively small, and 2) Blackboard's facilitation of its "Assignments" feature leaves much to be desired re: usability by all its target users, please send me your homework assignments either as e-mail attachments. To do this, send me your documents in whatever format I call for (per assignment, per week, likely in .pdf form or as MS Word documents), AND—please use the following language in your subject line: “ADES 5410-YourLastName-assignment title.”

**Attendance Policy**
Attendance is mandatory. The instructor will take roll at the beginning of each class session. Every unexcused absence over two will result in a letter grade reduction of the final course grade beginning with the third unexcused absence. Each two instances of tardiness over an initial two of these will be counted as one absence. A student is tardy if he/she arrives after the first 15 minutes of class have elapsed. No make-up opportunities for a missed class session will be given to any student enrolled in this course unless that student presents the professor with a UNT-Approved Absence Verification form within 72 hours of the ending of the class session that was missed. Students are hereby notified that meeting with the Instructor of Record for this course during an office hours session does NOT make up/cannot be substituted for a class session that was missed.

**Course Risk Factor**
This class has been assigned a **Level 1 Risk Rating**, a course in which students are exposed to some minor hazards (most particularly,
repeated computer usage), but are not likely to suffer bodily harm.

**American Disabilities Act**
The College of Visual Arts and Design is committed to full academic access for all qualified students, including those with disabilities. In keeping with this commitment, and in order to facilitate equality of educational access, faculty members in the College will execute reasonable accommodations for qualified students with a disability, such as making appropriate adjustments to the classroom environment, as well as to the teaching, testing, or learning methodologies that are operated within the structure of the course, as long as actuating any of these adjustments does not fundamentally alter the content that must be delivered within the structure of the course.

If you have a disability, it is your responsibility to obtain verifying information from the Office of Disability Accommodation (ODA; https://disability.unt.edu/), and to inform the instructor of your need for an accommodation. It is preferred that requests for accommodation be given to the instructor no later than 5 pm CDT on the final day of the first week of classes for students registered with the ODA as of the beginning of the current semester. If you register with the ODA after the first week of classes, your accommodation requests will be considered after this deadline.

*Grades assigned before an accommodation is provided will not be changed.* Information about how to obtain academic accommodations can be found in UNT Policy 18.1.14, at https://disability.unt.edu/, and by visiting the ODA in Sage Hall on the UNT Denton campus, room 167 (visit the UNT website for updated location information). You also may call the ODA at 940.565.4323.

**Building Emergency Procedures**
In case of emergency, an alarm will sound. If this occurs, please follow the building evacuation plans posted on each floor of your building and proceed to the nearest parking lot. In case of a tornado (campus sirens will sound), or other weather-related threat, please go to the nearest hallway or room on your floor without exterior windows and remain there until an all clear signal is sounded. Follow the instructions of your instructors and act accordingly.

**Student Rights and Responsibilities**
Each University of North Texas student is entitled to certain rights associated with higher education institutions. See www.unt.edu/csrr for further information.

**Disclaimer**
The instructor retains the right to change the course syllabus and schedule without notice.

*For more crucial information about this course—including our weekly schedule—please continue reading on p. 5 (the next page), and on p. 6.*
A WEEK-TO-WEEK SYNOPSIS OF WHAT WE’LL BE LEARNING AND DOING THIS SEMESTER

Overview

Week 01 | 08.28.17 | What is interaction design? Approaches to identifying and framing design opportunities/proposals (rather than “problems”)

Week 02 | 09.04.17 | No class: Labor Day holiday

Week 03 | 09.11.17 | Examining design critiques

Week 04 | 09.18.17 | Ideation fueled by sketching

Week 05 | 09.25.17 | Coming to know the core concepts that inform design and design processes

Week 06 | 10.02.17 | Engaging in divergent and convergent thinking to fuel design synthesis

Week 07 | 10.09.17 | Operationalizing personas, scenarios-of-use, and storyboard

Week 08 | 10.16.17 | Exploring design rationales

Week 09 | 10.23.17 | An immersion into “paper prototyping” and usability testing

Week 10 | 10.30.17 | An introduction to a specific array of prototyping tools

Week 11 | 11.06.17 | Making your “initial pitches:” exploring communication and assessment

Week 12 | 11.13.17 | A deeper immersion into prototyping and usability testing

Week 13 | 11.20.17 | Critically reflecting on your design decision-making

Week 14 | 11.27.17 | Initial iterations of each student’s end-of-semester presentations

Week 15 | 12.04.17 | Final iterations of each student’s end-of-semester presentations

Due
Please enter this learning experience with an open, “broadly framed” array of mindsets, and plan on thinking in ways that may be new to you.

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The University of North Texas
College of Visual Arts and Design
Department of Design
Overview: Your “In-class, In-a-Group” Project

You will participate in a group project that will mostly transpire during our class sessions through Week 08 (10.16.17) of this semester. The purpose of the group project is twofold: first, it will give you an opportunity to practice specific IxD skills you’ll learn in this course (and, for some of you, in ADES 5420) learn in class and through, so you can get some experience with them before you need to apply them to your individual projects as the latter portion of the semester unfolds. Second, it gives you a chance to work on a second project during the semester, which might result in the creation of an additional project that you can add to array of “tangible project outcomes” you’ll accrue as you advance through this program.

Your “In-class, In-a-Group” Project: Enhancing Music in the Cloud

Music plays a large part in the lives of many: we use it to define our peer groups, we share it as a form of bonding, we curate it in the form of personal music collections, playlists, mix CDs and the like. Increasingly, our access to digital music is becoming effectively unlimited through online/cloud-based services. While these services enable people to hear any song or album that they can think of, they also come with their share of usability problems. The sheer volume of the material they contain/deliver, as well as the design of their interfaces, combined with the dysfunctionality of at least some of their features, make a lot of the activities that people used to “do with their music” really difficult or impossible. (These activities range from curation of a collection, to sharing and/or discovering new music, to analyzing arrangements or collections of sheet music, among many others.)

To begin this project, each group must select one thing that you would like to be able to do with “your music” that, to your knowledge, is currently not well-supported by any extant, streaming music services. Define what this activity(ies) is/are, articulate why it/they is/are important, and finally describe why you collectively believe it is currently not effectively supported. Once you have done this, begin to design a better way that that this activity could or should work.

To ground your group project within a specific and realistic set of constraints, choose an online music service of your choice with a public API (Applied Program Interface) to give your eventual proposal a viable design context. Whatever your group eventually proposes should be perceived as a viable extension to that service (for example, it could operate as an extension to Tunefind, Jambase, or Spotify). To see what is currently possible, feel free to look at the services’ APIs (a brief list appears below).

With all of that stated: please don’t feel like you need to be limited by the current array of development resources these services offer. You should try to devise, design and at least rudimentarily develop a system augments the service of your choice to good effect, but bear in mind that doing this may necessitate that you have to imagine that you have the ability to alter the functionality of some of these systems to facilitate the operation of your new or revised service, activity or service extension.

Some sample APIs:
- http://developer.rdio.com/
- http://www.last.fm/api
The purpose of the in-class group project is not necessarily to generate a perfect or polished end-result, but rather to continually practice the design techniques and topics we will be covering as the semester progresses. Learning-by-doing is paramount to your success on this project. Your participation grade will be determined in part by your consistent and ongoing engagement with your in-class group project.

At the end of each class during which we’ve engaged in group work, please submit your work from that day (a paper, a link to a Google doc, etc.) with a list of all group members who were there and worked on the project that day. Each group will make a final presentation of their work toward realizing a more effective way to extend an existing service for “music users,” or for inventing a new one, that could reasonably be operationalized through an extant, public API.

**Your Individual, Full-Semester Project**

The primary project of this course is one that you will develop, over the course of the entire semester. This process will evolve from the initial identification and framing of a situation you wish to improve, through its conceptualization and onward through a design research phase to ideation. All of these phases of development will be followed, or will cyclically overlap with, a prototyping phase that will evolve from your creation of a low-fidelity prototype to a mid-fidelity prototype.

Along the way, you will create a number of developmental artifacts that will allow you to effectively engage in the different, iterative stages of the design process (rough sketching and diagramming, personas, low-fi prototypes, etc.). The class activities and assigned coursework described in the course schedule will help each of you evolve your projects.

Each of you is hereby challenged to focus on a problematic social, technological, economic, public policy or environmental situation he/she cares deeply about, and that affects or involves your relationships with people you care about. You may choose something because it connects to your research interests, or some aspect(s) of your personal life. You’ll then be challenged to address whatever you’ve identified by engaging in the (here’s that word again…) iterative steps of systematically and perhaps systematically developing a means to effectively address your problematic situation.

One of the end-goals of this endeavor is to equip each of you with enough “material” to continue developing your project further at some point in the future, either within this curriculum or on your own.

**Getting more specific…**

Each of you regularly participates in a number of important relationships: with your parents, siblings, romantic partners, friends, and relatives. The current means for developing and supporting relationships through interactive technology—Facebook, Instagram, Snapchat, instant messaging, etc.—do not explicitly distinguish between relationship types, nor do they provide unique functionality to facilitate different types of relationships. (One exception to this is corporate groupware technology, but for the purposes of this project, the primary challenge is to consider non-work relationships.)

One effect of this is that the distinct characteristics of specific types of relationships are not particularly well-supported by current social technologies. Your overarching challenge during this project is to improve this situation.

Over the course of the semester, you must design and then initially test an interactive system that supports/facilitates one particular type
of relationship that is important to you but that is not sufficiently well-supported by current tools or toolkits.

As an additional design constraint, assume that the technology which will be used to support/facilitate this relationship must operate while the people in the relationship are living away from each other (e.g., while one is in a different state or country for school). So, the purpose of the technology you are designing is to help you maintain, and potentially even deepen, the relationship while you—or the other(s) in the relationship(s) with you—are separated for an extended period of time.

An essential aspect of the project will be for you to define what the relationship is and means, and what aspects of it you are most interested in trying to support. You’ll need to examine how that relationship is currently supported over distance and time, as well as what aspects of this “support” don’t work, or work well, currently. The outcome of your project should improve upon this. Critically analyzing specific characteristics of the relationship allows you to deeply think about what makes the relationship special, and allows you to consider how you might best want to support it.

**Scoping**

A helpful way to think about scoping is to define it in terms of the number of steps or interactions that your system will support (or need to support). For example, think about the process of shopping on Amazon. You first search, then the results page appears, then you click on a result to see the details for that item, then you add the item to cart, then you click to check out, etc. Each of these steps—entering a search term, clicking on a result, adding an item to cart—is a user interaction. Some of these interactions happen on the same page (e.g., adding to your cart and clicking the “Check Out” button both occur on the “Item Details” page), while other interactions move the user to a new page (clicking on an item in the results list opens the page with the detailed information for that item).

For your project, you should each attempt to prototype between 15 and 30 user interactions (i.e., steps-through-the-system) that take place across five to ten panels (e.g., web pages, screens of a mobile application). Most of these panels should be unique.

**A final note**

This is an interaction design class, which means that we will focus on critically examining the front-end, or “user-facing” aspects of technology: web pages, mobile apps, the control interfaces for home automation systems, etc. There are many interesting problematic situations that are imbued with a user-experience component, but that are ultimately not front-end problems. For example, the order in which Yelp or Amazon results appear is fundamental to the user experience of these systems and is something these companies spend a lot of time thinking about and working to improve.

With that stated, “determining the results-order” would not be a good project to operate in this course since this is an algorithmic problem rather than a user interaction problem. SO—choose a project that lets you develop a set of interesting user interactions, not something that is fundamentally about under-the-hood machinery.

**Homework**

You will be challenged with a homework assignment each week. These will be due at the outset of the class each week. Please post all homework assignments to that week’s
As you will discover, the design notebook can be a wonderfully effective source of inspiration and will help you generate both more ideas and better ideas for how to proceed with your project. Each of you will need to turn one of these in after your final presentation on December 11.

**Reading response**

Each week you will also have a three-paragraph “reading response” pertinent to the readings that are assigned each week. The reading response should posit your critical reflections about these, and articulate points from the reading you found particularly interesting or compelling. Write about what you found in them that was provocative, that you disagree with, or how you think they relate or might relate to your own project in an interesting way, etc. The purpose of the reading responses is to demonstrate that you thought critically about what you’ve read. Reading responses that show you engaged critically with the material will receive 2 points. Reading responses that summarize the readings without much more thought will receive 1 point. Minimal or no responses will receive 0 points.

**Maintaining a design notebook**

As you begin to think about individual project, you should create a design notebook—a place (physical or digital) where you collect as much information that relates to your project as you can find (e.g., screenshots or pictures of other systems that address a similar problem, print-outs of messages in online forums where people discuss the problem you are working on, photos of things you encounter in the street, replies from Facebook to a question you posed to your social network, etc.).