

ADES 5430 – INTERACTION DESIGN MAKERLAB 1

Instructor: Michael R. Gibson, Associate Professor or Keith M. Owens, Associate Professor

*Office Hours:*TBD

Course Description

This three semester-credit-hour course is the pre-cursor to the six semester-credit-hour offering titled "Interaction Design: Inception-to-Pitch Capstone Project." This course is designed to be taken during the second semester of enrollment in the curriculum that facilitates the MA in Design with a Concentration in Interaction Design program. Its course content has been structured in ways that build upon knowledge and understandings students constructed during their enrollments in ADES 5410 | Foundations & Frameworks of Interaction Design and ADES 5420 | Human-Centered Interaction Design 1 during the previous semester.

Unlike the other course offerings in this curriculum, ADES 5440 | Interaction Design Makerlab 1 is designed to facilitate a series of learning experiences tailored to meeting the needs of students working individually rather in groups or teams. Individual students will be challenged to develop and design a single interactive, screen-based system over the course of the semester that meets the needs and aspirations of a particular group on behalf of an assigned client, organization or institution. No two student's projects will evolve according to the same sets of parameters.

Each student will iteratively work through a sometimes cyclic (i.e., non-linear) process of development that will require him/her to advance from the construction of specifications to the creation of information architecture, wireframes, storyboards, video (as necessary), and simulations and demonstrations that incorporate the operation and testing of various user interface components across their respective systems. Accommodating scenarios of use that span mobile, web and tablet-based interactions will be stressed, as will the need for each student's system to accommodate levels of scale that span the spectrum from the operation of specific controls and applications to ensuring effective functionality in a complex environment. A select array of technical skills that help facilitate prototyping, programming and coding, and computational thinking will be presented, but it is expected that each student will augment these presentations with their own, self-guided construction of knowledge in these areas as necessary to operationalize their respective systems.

Prerequisites (for MA in Des w/ Concentration in IxD students): ADES 5410 and 5420 with a course grade of "B" or better; (for Com Sci and Tech Comm students): permission of the instructor, and (preferably) proof-of-passage of ADES 5410 and 5420 with a course grade of "B" or better, OR two, 5000-level Com Sci or Tech Comm 3 SCH offerings that the instructor judges to be on par with ADES 5410 and 5420 with a course grade of "B" or better.

Required Texts

Mills, R. (2012). *A Practical Guide to Designing the Invisible*. Penarth, UK: Five Simple Steps Publishing.

Lichaw, D. (2015). *The User's Journey*. Sebastopol, CA, USA: Rosenfeld Media.

Tidwell, J. (2011). *Designing Interfaces (Second Edition)*. Sebastopol, CA, USA: O'Reilly Media

Recommended Texts

Lombardi, V. (2013). *Why We Fail*. Sebastopol, CA, USA: Rosenfeld Media.

Saffer, D. (2009). *Designing for Interaction (Second Edition)*. San Francisco, CA, USA: New Riders Publishing.

Course Objectives

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

- utilizing knowledge gleaned from well-crafted specifications to guide the iterative development of effective Information Architecture (IA)
- utilizing knowledge gleaned from strong IA to guide the iterative development of wireframes and storyboards
- utilizing knowledge gleaned from well-designed wireframes to guide the iterative development of testable, assessable "paper prototypes"
- utilizing knowledge gleaned from their analysis of usability testing facilitated by the operation of each of their sets of paper prototypes, students will learn to iteratively develop systemically unified/organized and systematically functional and appropriate user interface (UI) configurations

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

- planning and operating opportunities to demonstrate various "stages" of their respective system's development as a means to engage stakeholders and potential collaborators and investors in constructively critical dialogue that effectively guides design decision-making

- documenting the processes that informed the development of their systems, so that they emerge from this learning experience with the raw material and knowledge necessary to use the particular “conception stories” of their systems to showcase their expertise and potential to potential employers, collaborators and funders
- the abilities necessary to consistently and effectively initiate and sustain meaningful critical dialogue between themselves and their peers, their instructor(s), and potential collaborators and funders in ways that positively inform their design decision-making

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

- the ability to effectively interview individuals and small groups of stakeholders that affect and are affected by the design of a particular interaction or set of interactions, and then glean understandings that can be used to positively affect design decision-making from these interviews
- engaging in card sorting processes to develop and/or assess the organizational structure of a given interaction into categories that enhance systemic understanding among design teams and stakeholder groups
- planning and operating usability testing of prototypes in ways that account for the array of user or participant needs, biases, expectations and aspirations

Course Structure

This course is offered in a design studiolab format, and will meet for two, 90-minute class sessions per week (three contact hours per week total). 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 the entire 15 weeks engaged in a carefully scheduled sequence of learning experiences which have been orchestrated to help each individual design an effectively useful, usable and desirable interaction design system by the end of the semester. Students will work in the studiolab as required, and participate in class discussions and critical dialogues during class hours. 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 315 of Curry Hall, the Design Research Collaborative in Dallas, and the data visualization and simulation lab in the UNT New College at Frisco are available to students to work on assigned course projects outside of scheduled class time.

Evaluation

Each sequential phase of each student’s assigned interaction design system will be worth a specific number of total course points that will accumulate toward his or her’s final course grade. Each of these sequential phases 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 “per phase” criteria will be recorded on an assessment document that each student will receive one to two weeks after the culmination of each these phases. A final project and final project presentation must be completed by the final exam date and time for this course. There is no final exam for this course.

Project I	Designing an effective interactive, screen-based system	100%
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Attendance Policy

Attendance is mandatory. Students must sign the attendance sheet during the first (15) minutes of class. No student may sign for another. 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. Requests for accommodation must be given to the instructor no later than 5 pm CST 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.