ADES 2523 – Digital Patterns and Systems

Office Hours: TBD
Office Locations and Instructors’ e-mails: (UNT Denton CVAD Building Complex): Owens, K.M.: room 345B (keith.owens@unt.edu)

Course Description
This three-semester-credit-hour undergraduate course will transpire over a 15-week span of time and is designed to build upon knowledge students have attained in earlier courses.

Course Content
This course will be comprised of three sequential, interactive systems design projects that will be assigned to individual and/or teams of students. Each of these projects will challenge the students and student teams assigned to address it to develop, design, implement and test at least a portion of a viable, user-centered, interactive system that will facilitate a given user group’s ability to facilitate a specific set of tasks or achieve a specific set of goals. Each of these projects should, when completed, yield an interactive system that functions well enough to allow members of the given user group to operate it in at least three relevant scenarios of use so that its efficacy and appropriateness can be tested and assessed.

Each student or student team will be challenged—on a per-project basis—to construct and discover new knowledge and understandings as he/she engages in various “problem identification and framing” exercises as the semester progresses (the knowledge and understandings constructed from each of these exercises will guide the development of each assigned interactive systems design project). Additionally, students’ teams will necessarily engage in iterative design processes, prototype(s) development, and some degree of testing and implementation on a per project basis as required to successfully realize the completion of their respective, assigned interactive systems projects.

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Required Texts

Recommended Texts

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

- the abilities necessary to develop, design and imbue effective functionality within the so-called “global elements” that occur across an entire interactive system (i.e., that a user encounters on each screen or page or environment)
- the abilities to develop, design and effectively implement—as supported by data gleaned through usability testing with members of target user groups)—navigation elements and the patterns of use that guide their functionality across an entire interactive system
- the abilities to construct and cultivate knowledge of and about how to design and deploy informational hierarchies — comprised mostly of typographic elements, symbols, imagery and the considerate assertion of color —that aid and abet a given user group’s ability to discern and effectively act upon the information provided within a given interactive system
- the ability to use appropriate descriptive language and nomenclature regarding the processes that inform and guide the design of effective user experiences and interactive systems
- 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 as a complex, interactive systems project evolves
Course Structure
This course is offered in a design studiolab format, and will meet for two, 170-minute class sessions per week.

Because of the current pandemic conditions, the course will be divided. One half of the enrolled students will meet with the instructor in person on Mondays and the other half of enrolled students will meet with the instructor on Wednesdays. The entirety of critique for each group of students will occur on their respective in-class days and at no other time. Because of this less-than-ideal learning structure, students will need to diligent in their efforts to stay current with coursework.

Evaluation
Students will evaluated on their completed course work and class engagement and participation. The course work will be comprised of the following three projects:

Project 01
Student teams will work to plan and develop what Don Norman describes as an “information appliance:” an interactive system that a given user group can use to address specific needs or complete particular jobs; examples of these could be home medical advisors, or a system that displays combinations of how real-time weather and traffic will affect a given user’s commute, or a system that monitors and categorizes the types of “electronically facilitated activities” a given child engages in on a daily basis [01.13.21–02.10.21]

Project 02
Each student team will endeavor to plan and develop an interactive system that relies on gamification to inform and guide how the system operates to meet the needs of a particular user group that is challenged to learn a given array of topic-specific material (like how different types of scholarship and fellowship models and student loan programs work—or don’t—for particular types of college students, or how and why different types of flora and fauna have come to occupy different types of geographic regions in Texas) [02.11.21–3.17.21]

Project 03
Assigned student teams will work to identify and frame the context for a “problematic situation” that is occurring that is negatively affecting how a given user group interacts with a given system, or is being challenged to, as that user group attempts to complete a specific task or fulfill a particular goal or set of goals. Each team will then endeavor to plan, develop and design a type of interactive system, or at least three aspects of one, that improves the interactive experience on the part of the user group. This project could entail student teams developing systems that act on behalf of users or user groups as “agents” that make use of stores of data acquired from specific types of user activity. Agents such as these could be capable of undertaking simple actions such as managing and making appointments, or retrieving and sorting data files. [3.18.21–4.21.21]

Attendance Policy
Attendance is mandatory. Students must sign the attendance sheet or answer a roll call facilitated by the instructor during the first (5) minutes of class. No student may sign or answer 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. Missing five class sessions over the course of the semester for any reason(s), even if some portion of these absences are excused, will cause a student to flunk (i.e., earn a final course grade of “F”) in ADES 3503.
Pandemic Considerations
While attendance is expected as outlined above, it is important for all of us to be mindful of the health and safety of everyone in our community, especially given concerns about COVID-19. Please contact me if you are unable to attend class because you are ill, or unable to attend class due to a related issue regarding COVID-19. It is important that you communicate with me prior to being absent so I may make a decision about accommodating your request to be excused from class. If you are experiencing any symptoms of COVID-19 (https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or askSHWC@unt.edu) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Hotline at 844-366-5892 or COVID@unt.edu for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure. While attendance is an important part of succeeding in this class, your own health, and those of others in the community, is more important.

Class Materials for Remote Instruction
The UNT fall schedule requires this course to have fully remote instruction beginning November 28th. Additional remote instruction may be necessary if community health conditions change or you need to self-isolate or quarantine due to COVID-19. Students will need access to a [webcam and microphone – faculty member to include what other basic equipment is needed] to participate in fully remote portions of the class. Additional required classroom materials for remote learning include: [list specific software, supplies, equipment or system requirements needed for the course]. Information on how to be successful in a remote learning environment can be found at https://online.unt.edu/learn.

Face Coverings
Face coverings are required in all UNT facilities. Students are expected to wear face coverings during this class. If you are unable to wear a face covering due to a disability, please contact the Office of Disability Access to request an accommodation. UNT face covering requirements are subject to change due to community health guidelines. Any changes will be communicated via the instructor.

Course Risk Factor
This class has been assigned a level 1 Risk Rating, which means that 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 may also also 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.

Computer and Connectivity Requirements:
Students are required to have computer access, Web browser software, and a hi-speed Internet connection for this course. Requirements include microphone and camera access for audio and video capabilities. Zoom on your primary computer desktop will be the classroom’s designated video conference software. It is highly recommended that you have access to a high-resolution scanner for some of these assignments. Please note that you will also need to access the Adobe Creative Cloud Software Suite and type fonts. The cost for remote access to this software suite is currently $19.95 per month, paid on a yearly basis.

ZOOM Etiquette (if necessary)
Arrive early.
Dress appropriately for class.
Turn your video on. Be engaged in the conversation.
Try to look into the camera. Adjust the camera to eye level.
Do your own tech support before you start.
Find a quiet space, but also one where you can also speak up when called upon.
Stay muted if you’re not talking.
The Zoom chat is not private. Don’t type things you don’t want others to see.
Don’t eat during class. Breaks will be given periodically.
Don’t conduct other private things during class.
Stay focused and participate.
Do not invite other people who don’t need to be here.