

**University of Texas at Austin, Austin, TX**  
**Fall 2020 Semester**  
**Online sessions**

**Course Title:** INF 350C: Advanced Topics in HCI: Design and Research Fundamentals  
<https://www.ischool.utexas.edu/courses/class-description?courseID=5455>

**Unique** 27028

**Course Credit:** 3 Credits

**Meeting Times:** **Lectures will be every week Wednesday from 6p-7:30p (optional, recorded), if this time does not work we will move it\***

Online lecture via zoom, readings, and assignments

Office hours: TBD - based on student feedback, take the quiz the first week of class

**Professors:** **Sandra Sweat, MSIS**

Adjunct professor

School of Information Science

Office hours: To be determined (based on student feedback)

Best Contact: Canvas Message

**Chase Airmet, MSID**

Adjunct professor

School of Information Science

Office hours: To be determined (based on student feedback)

Best Contact: Canvas Messaging

**Course Description:**

This course is designed to give students a holistic understanding of the research & design process. Each section covers what it means to apply research and design to problems faced by consumers, businesses, and groups of people. The techniques covered in this course will help students gain confidence in visual communication, research techniques, understand the different practices related to learning about users, and the elements of design.

**What will I learn?**

*Main skills and attitudes to be developed:*

- How to conduct research to learn about software users and how to apply research findings.
- How to test ideas quickly and make changes based on feedback.
- Communicating ideas and findings based on your audience.
- Working as part of a research & design team.
- Fundamentals of visual design to communicate ideas and product decisions.

- Application of the iterative design process.
- Students will engage in analogue and digital drawing as a means to express the research, development, and design process.

### **How will I learn?**

The course will be split into 3 sections following basic design thinking steps of **Inspiration, Ideation/Imagination, and Implementation.**

- Assignments will be focused on practicing research and design techniques.
- The third part of the course will be weekly critiques and student presentations on research and design topics.
- Read all assignments and ask questions at least 2 days prior to the due date.

### **Prerequisites for the course:**

There are no prerequisites for the course

### **How to succeed in this course:**

Students are responsible for reading the assignment and asking for clarification prior to the assignment due date.

*\*Class recordings are reserved only for the use of members of this class (students, TAs, and the instructor) and only for educational purposes. Recordings should not be shared outside the class in any form. Violation of this restriction could lead to Student Misconduct proceedings.*

## **Course Requirements**

### **Required Materials**

These two books can be obtained from the coop or from any vendor on the internet that sells these books.

#### **Textbooks - Research & Design (Must have by second week of class)**

- Norman, D. A. (2013). *The design of everyday things*. New York: Basic Books.
- Hall, E. (2019). *Just enough research*. NY, NY: A Book Apart.

#### **Excerpts from the following books will be used during class, you DO NOT need to purchase them:**

- Krug, S. (2010). *Rocket Surgery Made Easy: The Do-It-Yourself Guide to Finding and Fixing Usability Problems*. Berkeley CA: New Riders.
- Buley, L. (2013). *The User Experience Team of One: A Research and Design Survival Guide*. Brooklyn, N.Y: Rosenfeld Media.
- Martin, B. & Hanington, B. (2018). *The Pocket Universal Methods of Design*. Beverly MA: Rockport Publishers.

#### **Textbooks - Design (Optional reading)**

- Kelley, T., Et al (2001) The Art of Innovation
- Cialdini, R (2007) Influence
- Monteiro, M (2019) Ruined by Design
- Norman, D (2004) Emotional Design: Why we Love (or Hate) Everyday Things

### **Supplies**

A light and dark pen, preferably felt tip.

Sketchbook for drawing journal - Tan Tone is great, but really anything will do. I prefer spiral bound so the sketchbook can lay flat.

Figma, it is a free tool so sign up for it and download it.

Below are some links to tools I like and recommend:

[Tan Tone Sketchbook](#)

[Pilot Razor Pens](#)

[Gray Prismacolor Markers Set](#) -or- [Single Marker](#)

Sharpies

### **Classroom expectations**

**Class participation** students are expected to participate in online discussions and by asking questions (via canvas or during office hours) and following guidelines for providing feedback.

**Behavior expectations** students are expected to respect instructors, classmates, and research volunteers.

### **Assignments**

All assignments will have complete descriptions separate from the syllabus. Some assignments will be exclusively for the design or research course. Unless otherwise noted, assignments will be due on Wednesday at midnight. Please refer to canvas for due dates and assignments that you need to complete for your section of the class.

**Weekly Assignments (Addition details will be available in Canvas & these will likely change prior to class starting for the semester)(weeks 1-8) (25%)**

#### **Weekly drawing practice**

In order to communicate your ideas visually, you will need the basic building blocks of drawing in order to quickly get your ideas on paper.

#### **Weekly discussions**

Based on the class material, you will get practice utilizing what you learned in the section. These discussions should take 10-15 minutes every week and will help you demonstrate understanding of the course material. Topics will include, but are not limited to:

- Heuristic Evaluation
- Class feedback surveys
- Flow diagrams
- Mind mapping

- Color ethnography
- Paper Prototyping

## **Core Assignments (weeks 1-8) (50%)**

### **Self-Ethnography**

After completing the in class ethnography session, students will do an in-depth analysis of their own surroundings.

### **Secondary research presentation**

Learning how to quickly pull together information about a topic you know nothing about and using presentation skills.

### **Using a design tool**

Copying is one of the best ways to understand how and why a graphic interface works. It is also a good way to learn the ins-and-outs of an unfamiliar piece of software.

### **Design of Everyday Things**

Documentation and presentation of everyday things around campus and your community that do not follow conventions. Visual ideations on solutions to everyday problems.

### **Competitive Analysis**

Understand what other people and companies are doing to solve the same (or similar problems) and use those ideas to make new ones.

### **Usability study**

Usability evaluation of a website or application.

### **Interview design & practice**

Creation of an interview guide based and practice interviewing classmates (and instructors) to demonstrate an understanding of best practices for understanding user motivations and behaviors.

## **Final Project Assignments (weeks 9-14) (25%)**

The final project will be in 4 parts:

### **Prototypes**

Completion of prototypes using different design tools.

### **Applied Research Synthesis**

Listing and description of research techniques used and findings.

### **Final Project Presentation Draft**

Prior to turning in your final, you will be required to submit your presentation for critique with instructors. You will sign up for a time with the instructors to receive feedback and make any iterations prior to recording your final presentation for the course. This is an

opportunity to ask questions and understand expectations of your final.

### **Final Project Presentation**

Case study of the research, prototyping, testing, and iteration to solve a problem.

### **Grading for this Course**

Grading for the course will be discussed in the first class section.

Each grouping of assignments will be weighted to reflect your overall grade for the class

<b>Assignment Category</b>	<b>Percent of grade</b>
Weekly Assignments	25%
Core Assignments	50%
Final Project Assignments	25%

### **Course Outline**

All instructions, assignments, readings, rubrics and essential information will be on the Canvas website at <https://utexas.instructure.com>. Check this site regularly and use it to ask questions about the course schedule.

**Changes** to the schedule may be made at our discretion and if circumstances require. It is your responsibility to note these changes when announced (although I will do my best to ensure that you receive the changes with as much advance notice as possible).

### **Class Modules (These will likely change prior to class starting)**

<b>Week</b>	<b>Class Topic</b>
1	Topic: Introduction to research and design history Skill: Sketching, Observation
2	Topic: Learning fast Skill: Presentations
3	Topic: Design and research process Skill: Synthesis
4	Topic: Type, color, composition Skill: Organizing a project
5	Topic: Qualitative and quantitative research Skill: Storytelling

6	Topic: Design tools Skill: Competitive analysis
7	Topic: Ethical considerations in research Skill: Evaluation
8	Topic: Getting primary information Skill: interviewing and survey creation
9	Guided process: introduction to the problem
10	Guided process: conduct research, create ideas
11	Guided process: test ideas
12	Guided process: refine an idea
13	Guided process: working prototype & draft presentation
14	Guided process: final presentations

## Policies

### Classroom Policies

#### Statement on Learning Success

Your success in this class is important to us. We will all need accommodations because we all learn differently. If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. Together we'll develop strategies to meet both your needs and the requirements of the course. We also encourage you to reach out to the student resources available through UT. Many are listed on this syllabus, but we are happy to connect you with a person or Center if you would like.

#### Grading Policies

Assignments are flexible, but grades are firm. If you are concerned about your class performance, talk to the instructor as soon as possible.

Grade	Cutoff
A	94%
A-	90%
B+	87%
B	84%
B-	80%
C+	77%
C	74%

C-	70%
D	65%
F	<65%

### **Late work**

Late work will be handled on a case-by-case basis. We expect assignments to be turned in on time and students to reach out to the professors prior to the due date for any extension considerations.

### **Absences**

The only absences that will be considered excused are for religious holidays or extenuating circumstances due to an emergency. The student must inform the professors prior to an absence. If there is an emergency, please notify the professors as soon as reasonably possible.

### **Student Rights & Responsibilities**

- You have a right to a learning environment that supports mental and physical wellness.
- You have a right to respect.
- You have a right to be assessed and graded fairly.
- You have a right to freedom of opinion and expression.
- You have a right to privacy and confidentiality.
- You have a right to meaningful and equal participation, to self-organize groups to improve your learning environment.
- You have a right to learn in an environment that is welcoming to all people. No student shall be isolated, excluded or diminished in any way.

With these rights come responsibilities:

- You are responsible for taking care of yourself, managing your time, and communicating with the teaching team and with others if things start to feel out of control or overwhelming.
- You are responsible for acting in a way that is worthy of respect and always respectful of others. · Your experience with this course is directly related to the quality of the energy that you bring to it, and your energy shapes the quality of your peers' experiences.
- You are responsible for creating an inclusive environment and for speaking up when someone is excluded.
- You are responsible for holding yourself accountable to these standards, holding each other to these standards, and holding the teaching team accountable as well.

### **Personal Pronoun Preference**

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by a name different than what appears on the roster, and by the gender pronouns you use. Please advise me of this preference early in the semester so that I may make appropriate changes to my records.

## University Policies

### Academic Integrity

Each student in the course is expected to abide by the University of Texas Honor Code: “As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity.” **Plagiarism is taken very seriously at UT.**

Therefore, if you use words or ideas that are not your own (or that you have used in previous class), you must cite your sources. Otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course. You are responsible for understanding UT’s Academic Honesty and the University Honor Code which can be found at the following web address:

[http://deanofstudents.utexas.edu/sjs/acint\\_student.php](http://deanofstudents.utexas.edu/sjs/acint_student.php)

### Q Drop Policy

If you want to drop a class after the 12th class day, you’ll need to execute a Q drop before the Q-drop deadline, which typically occurs near the middle of the semester. Under Texas law, you are only allowed six Q drops while you are in college at any public Texas institution. For more information, see: <http://www.utexas.edu/ugs/csacc/academic/adddrop/qdrop>

### University Resources for Students

Your success in this class is important to me. We will all need accommodations because we all learn differently. If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. Together we’ll develop strategies to meet both your needs and the requirements of the course. There are also a range of resources on campus:

#### *Services for Students with Disabilities*

This class respects and welcomes students of all backgrounds, identities, and abilities. If there are circumstances that make our learning environment and activities difficult, if you have medical information that you need to share with me, or if you need specific arrangements in case the building needs to be evacuated, please let me know. I am committed to creating an effective learning environment for all students, but I can only do so if you discuss your needs with me as early as possible. I promise to maintain the confidentiality of these discussions. If appropriate, also contact Services for Students with Disabilities, 512-471-6259 (voice) or 1-866-329- 3986 (video phone). <http://ddce.utexas.edu/disability/about/>

#### *Counseling and Mental Health Center*

Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like



anxiety or depression, we strongly encourage you to seek support.

<http://www.cmhc.utexas.edu/individualcounseling.html>

### *The Sanger Learning Center*

Did you know that more than one-third of UT undergraduate students use the Sanger Learning Center each year to improve their academic performance? All students are welcome to take advantage of Sanger Center's classes and workshops, private learning specialist appointments, peer academic coaching, and tutoring for more than 70 courses in 15 different subject areas. For more information, please visit <http://www.utexas.edu/ugs/slc> or call 512-471-3614 (JES A332).

*Undergraduate Writing Center:* <http://uwc.utexas.edu/>

*Libraries:* <http://www.lib.utexas.edu/>

*ITS:* <http://www.utexas.edu/its/>

*Student Emergency Services:* <http://deanofstudents.utexas.edu/emergency/>

### **Important Safety Information:**

If you have concerns about the safety or behavior of fellow students, TAs or Professors, call BCAL (the Behavior Concerns Advice Line): 512-232-5050. Your call can be anonymous. If something doesn't feel right – it probably isn't. Trust your instincts and share your concerns.

### **Title IX Reporting**

Title IX is a federal law that protects against sex and gender-based discrimination, sexual harassment, sexual assault, sexual misconduct, dating/domestic violence and stalking at federally funded educational institutions. UT Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When sexual misconduct occurs in our community, the university can:

1. Intervene to prevent harmful behavior from continuing or escalating.
2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
3. Investigate and discipline violations of the university's [relevant policies](#).

Faculty members and certain staff members are considered "Responsible Employees" or "Mandatory Reporters," which means that they are required to report violations of Title IX to the Title IX Coordinator. **I am a Responsible Employee and must report any Title IX related incidents** that are disclosed in writing, discussion, or one-on-one. Before talking with me, or with any faculty or staff member about a Title IX related incident, be sure to ask whether they are a responsible employee. If you want to speak with someone for support or remedies without making an official report to the university, email [advocate@austin.utexas.edu](mailto:advocate@austin.utexas.edu) For more information about reporting options and resources, visit [titleix.utexas.edu](http://titleix.utexas.edu) or contact the Title IX Office at [titleix@austin.utexas.edu](mailto:titleix@austin.utexas.edu).

The following recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767, <http://www.utexas.edu/safety/>

Occupants of buildings on The University of Texas at Austin campus are required to evacuate

buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.

- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
- Link to information regarding emergency evacuation routes and emergency procedures can be found at:

[www.utexas.edu/emergency](http://www.utexas.edu/emergency)