# DESIGN PERSPECTIVES AND PROCESSES I

### **Course Description**

This course introduces human-centered design, a powerful approach to design that begins with understanding unmet customer needs. Students learn the process for innovation that emerges from this focus, conducting user research and product development and testing. Students also learn principles for designing products that are highly accessible.

### **Course Objectives**

- 1. **Gaining factual knowledge and fundamental principles:** In this course, students will learn about the processes and principles of human-centered design.
- 2. **Learning to apply course material:** Students will practice applying their knowledge of human-centered design processes and principles by designing a product.
- 3. **Developing specific skills, competencies, and points of view of professionals:**Students will gain skills for applying the different elements of the human-centered design process. They will gain perspectives for evaluating products as broadly usable and visually appealing, according to principles of human-centered design.
- 4. **Developing creative capacities:** Students will practice moving from identifying user needs to generating and refining the design of real products.

### Instructor

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Teacher

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Instructional Technology & Learning Sciences

Arranged

### **Course Resources**

### **Reading Materials:**

Beyer, H., & Holtzblatt, K. (1999). Contextual design. Interactions, (1), 32-42.

Buxton, B. (2010). Sketching user experiences: getting the design right and the right design. Morgan kaufmann.

Greenberg, S., Carpendale, S., Marquardt, N., & Buxton, B. (2011). *Sketching user experiences: The workbook.* Elsevier.

Holtzblatt, K. & Beyer, H. <u>Contextual design</u>. The encyclopedia of human-computer interaction, 2nd Ed.

IDEO Design Kit (2015). The field guide to human-centered design . IDEO Canada.

Krug, S. (2000). Don't make me think!

Krug, S. (2009). <u>Rocket surgery made easy: The do-it-yourself guide to finding and fixing usability problems</u>. New Riders.

Norman, D. (2013). The design of everyday things. Basic books.

Portigal, S. (2013). *Interviewing users: how to uncover compelling insights*. Rosenfeld Media.

Rosson, M. B., & Carroll, J. M. (2009). Accessibility score: Low Click to improve Scenario-based design. Actions . In *Human-computer interaction* (pp. 161-180). CRC Press.

Story, M. F. (1998). Maximizing usability: the principles of universal design . *Assistive technology*, *10*(1), 4-12.

Williams, R. (2008). The non-designer's design book (3rd ed). Pearson Education.

### **Course Requirements**

Each student will:

- 1. Work through critical elements of the human-centered design process by completing elements of a course-long design project.
- 2. Be a thinking partner to their classmates, giving them productive feedback on elements of their design project throughout the semester.
- 3. Read human-centered design literature and engage in class discussions.
- 4. Watch videos on design and engage in class discussions.
- 5. Demonstrate understanding of the points raised in the human-centered design literature in their designed product.

#### **Evaluation Methods and Criteria**

- 1. Weekly project assignments 30 points/week = 70% of total grade
- 2. Weekly discussion contributions 10 points/week = 30% of total grade

### **Grade Scheme**

The following grading standards will be used in this class:

Grade	Range
Α	100 % to 93.0%
A-	< 93.0 % to 90.0%
B+	< 90.0 % to 87.0%
В	< 87.0 % to 83.0%
B-	< 83.0 % to 80.0%
C+	< 80.0 % to 77.0%
С	< 77.0 % to 73.0%
C-	< 73.0 % to 70.0%
D+	< 70.0 % to 67.0%
D	< 67.0 % to 60.0%
F	< 59.0 % to 0.0%

Late work is handled on a individual basis.

## **Nonattendance Policy**

### **Students May Be Dropped For Nonattendance.**

If a student does not attend a class during the first week of the term or by the second class meeting, whichever comes first, the instructor may submit a request to have the student dropped from the course. (*This does not remove responsibility from the student to drop courses which he or she does not plan to attend.*) This option is typically used for classes that are full and the instructor is trying to make a seat available for another student, but may be considered for other courses. Requests must be made during the first 20 percent of the course and will be considered on an individual student basis. Students who are dropped from courses will be notified by the Registrar's Office through their preferred e-mail account (see 2018-2019 General Catalog).

## **Assumption of Risk**

All classes, programs, and extracurricular activities within the University involve some risk, and certain ones involve travel. The University provides opportunities to participate in these programs on a voluntary basis. Therefore, students should not participate in them if they do not care to assume the risks. Students can ask the respective program leaders/sponsors about the possible risks a program may generate, and if students are not willing to assume the risks, they should not select that program. By voluntarily participating in classes, programs, and extracurricular activities, a student does so at his or her own risk. General information about University Risk Management policies, insurance coverage, vehicle use policies, and risk management forms can be found at: <a href="http://www.usu.edu/riskmgt/">http://www.usu.edu/riskmgt/</a>

### **Library Services**

All USU students attending classes in Logan, at our Regional Campuses, or online can access all databases, e-journals, and e-books regardless of location. Additionally, the library will mail printed books to students, at no charge to them. Students can also borrow books from any Utah academic library. Take advantage of all library services and learn more at <a href="libguides.usu.edu/rc">libguides.usu.edu/rc</a>.

### **Classroom Civility**

Utah State University supports the principle of freedom of expression for both faculty and students. The University respects the rights of faculty to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede the learning process. Disruptive classroom behavior will not be tolerated. An individual engaging in such behavior may be subject to disciplinary action. Read <a href="Student Code Article V Section V-3">Student Code Article V Section V-3</a> for more information.

# **University Policies & Procedures**

## **Academic Freedom and Professional Responsibilities**

Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to the limitations imposed by professional responsibility. Faculty Code Policy #403 further defines academic freedom and professional responsibilities.

## Academic Integrity - "The Honor System"

Each student has the right and duty to pursue his or her academic experience free of dishonesty. To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge:

"I pledge, on my honor, to conduct myself with the foremost level of academic integrity."

A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;
- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- Is a welcomed and valued member of Utah State University.

### **Academic Dishonesty**

The instructor of this course will take appropriate actions in response to Academic Dishonesty, as defined the University's Student Code. Acts of academic dishonesty include but are not limited to:

- Cheating: using, attempting to use, or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity. Unauthorized assistance includes:
  - Working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done "individually;"
  - Depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
  - Substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work;
  - Acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;
  - Continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity;

- Submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or engaging in any form of research fraud.
- **Falsification**: altering or fabricating any information or citation in an academic exercise or activity.
- Plagiarism: representing, by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.

For additional information go to: <u>ARTICLE VI. University Regulations Regarding</u>
Academic Integrity

#### Discrimination and Sexual Misconduct

### **General Overview**

USU strives to provide an environment for students and employees that is free from discrimination and sexual misconduct. If you experience sexual misconduct or discrimination at any point during the semester inside or outside of class, you are encouraged to contact the USU Title IX Coordinator via Distance Education room 400 in Logan, 435-797-1266, titleix@usu.edu, or at equity.usu.edu/report. You can learn more about the USU resources available for individuals who have experienced sexual misconduct at sexualrespect.usu.edu

. Resources for individuals who have experienced discrimination are listed at equity.usu.edu/resources.

### Required Reporting of Sexual Misconduct

The instructor is designated by USU as a "reporting employee." This means that if you share information about sexual misconduct. (sexual harassment, sexual exploitation, sexual assault, relationship violence, or sex-based stalking) with the instructor, they will report that information to the USU Title IX Coordinator. The instructor is also required to tell you about designated confidential resources, supportive measures, and how you can file a report with the USU Title IX Coordinator.

## Withdrawal Policy and "I" Grade Policy

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The term 'extenuating' circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

#### **Students with Disabilities**

USU welcomes students with disabilities. If you have, or suspect you may have, a physical, mental health, or learning disability that may require accommodations in this course, please contact the <u>Disability Resource Center (DRC)</u>. as early in the semester as possible (University Inn # 101, (435) 797-2444, drc@usu.edu). All disability related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.

Students who are at a higher risk for complications from COVID-19 or who contract COVID-19 may also be eligible for accommodations.

## **Respect for Diversity**

Regardless of intent, careless or ill-informed remarks can be offensive and hurtful to others and detract from the learning climate. If you feel uncomfortable in a classroom due to offensive language or actions by an instructor or student(s) regarding ethnicity, gender, or sexual orientation, contact:

- Division of Student Affairs: <a href="https://studentaffairs.usu.edu">https://studentaffairs.usu.edu</a>, (435) 797-1712, studentservices@usu.edu. TSC 220
- Student Legal Services:
   <a href="https://www.usu.edu/involvement/student-association/student-advocacy/legal-services">https://www.usu.edu/involvement/student-association/student-advocacy/legal-services</a>.
   (435) 797-2912, TSC 326,
- Access and Diversity: <a href="http://accesscenter.usu.edu">http://accesscenter.usu.edu</a>, (435) 797-1728, access@usu.edu; TSC 315
- Multicultural Programs: <a href="http://accesscenter.usu.edu/multiculture">http://accesscenter.usu.edu/multiculture</a>, (435) 797-1728, TSC 315

- LGBTQA Programs: <a href="http://accesscenter.usu.edu/lgbtqa">http://accesscenter.usu.edu/lgbtqa</a>, (435) 797-1728,
   TSC 3145
- Provost's Office Diversity Resources: <a href="https://www.usu.edu/provost/diversity">https://www.usu.edu/provost/diversity</a>, (435) 797-8176

You can learn about your student rights by visiting: The Code of Policies and Procedures for Students at Utah State University: https://studentconduct.usu.edu/studentcode

### **Grievance Process**

Students who feel they have been unfairly treated may file a grievance through the channels and procedures described in the Student Code: Article VII.

### Full details for USU Academic Policies and Procedures can be found at:

- Student Conduct
- Student Code
- Academic Integrity
- USU Academic Policies and Procedures
- Academic Freedom and Professional Responsibility Policy

## **Emergency Procedures**

In the case of a drill or real emergency, classes will be notified to evacuate the building by the sound of the fire/emergency alarm system or by a building representative. In the event of a disaster that may interfere with either notification, evacuate as the situation dictates (i.e., in an earthquake when shaking ceases or immediately when a fire is discovered). Turn off computers and take any personal items with you. Elevators should not be used; instead, use the closest stairs.

### **General Health Protocols**

The cold, flu, COVID-19, and other illnesses can have an impact on the health of our university community. USU welcomes the wearing of masks in all university buildings and encourages taking measures to mitigate risk as recommended by federal and state public health officials: getting vaccinated, staying home if you are sick (even with mild symptoms), and frequent hand washing.

### **Mental Health**

Mental health is critically important for the success of USU students. As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Utah State University provides free services for students to assist them with addressing these and other concerns. You can learn more about the broad range of confidential mental health services available on campus at Counseling and Psychological Services (CAPS).

Students are also encouraged to download the <u>"SafeUT App"</u> to their smartphones. The SafeUT application is a 24/7 statewide crisis text and tip service that provides real-time crisis intervention to students through texting and a confidential tip program that can help anyone with emotional crises, bullying, relationship problems, mental health, or suicide related issues