

DIG 3124 Principles of Interactivity and Usability

Spring 2024

Course Meetings: Online

Course Location: Online Asynchronous (AO)

About the Course

Course Description

This course introduces students to the fundamental principles that govern successful interaction design. Through this course, students will develop an understanding of the importance of identifying users' needs and explore practical methods for providing solutions tailored to those needs. The primary goal of this course is to introduce students to the entire journey of the UI/UX design process—from identifying target users to developing a prototype. Topics include, but are not limited to, basic activities of interaction design, cognitive and emotional aspects of user experience, visual communication, prototyping, user testing, data gathering, and evaluation. Students will work as an individual as well as in a group to analyze the user experience and design the mobile app/website. Students should be comfortable working in an interdisciplinary group.

Course Prerequisites

This class has no prerequisites.

Learning Outcomes

- Identify problems of existing digital interfaces
- Understand the needs of key stakeholders and provide design solutions tailored to those needs.
- Collect and analyze data to identify system requirements
- Transform conceptual design ideas to physical design
- Use visual elements to prioritize information and optimize interactions
- Demonstrate an understanding of industry practices related to interactivity and usability of digital systems
- Gain experience working effectively in a collaborative group setting

Materials & Books

Required Tool

- Figma, Text Editor (e.g., Brackets)

Textbook (Optional)

- Interaction Design: Beyond Human-Computer Interaction (5th Edition), By Sharpe, Rogers, and Preece, Wiley & Sons (ISBN-13: 978-11119547259, ISBN-10: 11119547253)

Course Schedule

This schedule is only a guide and is subject to change.

WEEK	SUBJECT	ASSIGNMENT/QUIZ
Principles and Theories		
W 1	Course Introduction	Introduce yourself
W 2	What is UX Design UX Design Process	Exercise 1
W 3	Principles of Good UX Design Affordance, Feedback, Mapping	Exercise 2
W 4	Sensation and Perception Cognitive Models and Bias Memory and Attention	Quiz 1 Exercise 3
UX Design: Gathering User Requirements		
W 5	Identify Users and Market Analysis Disney Creative Thinking	Good and Bad Design Paper
W 6	Group Project 1: Market Analysis	Group Project 1
W 7	Project Overview Gamification	
W 8	User Research Methods: Survey and Interview User Persona, Scenario, and Journey Map	Exercise 4
W 9	Site map and Flow chart Wireframe	Quiz 2 Exercise 5
W 10	Spring Break	
UX Design: Wireframe and Prototyping		
W 11	Group Project 2: User Research and Wireflow	Group Project 2
W 12	Prototype Prototyping Tools: Adobe XD	Exercise 6
W 13	Web Design: HTML Web Design: CSS	Exercise 7
W 14	Usability Testing Graphic Design for User Interface	Quiz 3
W 15	Final Group Presentation	Final Group Project
W 16	Final Group Presentation	Final Group Report Peer Evaluation

Grading Criteria

Assignment / Assessment	Sub points	% of Grade
Participation and Feedback: Students are expected to actively participate in class discussions. Students will be asked to provide feedback and comments on the presentation of others. The feedback should be respectful and thoughtful.		10
Quizzes: Students will have a quiz hosted through Canvas. Quiz materials include lectures, assignments, readings, and other external resources.		25
Good and Bad Design Paper: To demonstrate your understanding of interaction design principles, each student will write a report on good and poor design.		15
Exercise: There will be 7 exercises throughout the course.		20
Exercise 1. App Design Sketch	2	
Exercise 2. Redesign an App	2	
Exercise 3. Resume Design	2	
Exercise 4. User Research Plan	2	
Exercise 5. Sitemap and Flowchart	2	
Exercise 6. Figma	5	
Exercise 7. HTML and CSS	5	
Group Project: Students will work in teams for the final project. Applying course materials, students will identify users' needs, ideate design concepts, develop prototypes, and run usability testing.		30
Project 1. Market Analysis	5	
Project 2. User Research & Wireflow	5	
Final Presentation	5	
Final Portfolio	10	
Peer Evaluation	5	
TOTAL		100%

* Please note that the group project is 30% of your grade. Students should be comfortable working in an interdisciplinary group. Students will work in a group of 4 to 5 members and can choose their own group. Please contact the instructor by week 3 to choose your own group.

Grading Scale

Letter Grade	% Equivalency
A	94 – 100%
A-	90 – 93%
B+	87 – 89%
B	84 – 86%
B-	80 – 83%
C+	77 – 79%
C	74 – 76%
C-	70 – 73%
D+	67 – 69%
D	64 – 66%
D-	60 – 63%
E, I, NG, S-U, WF	0 – 59%

More information on grades and grading policies is here: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Course Policies

Late Submission

All course work (including, but not limited to: assignments, quizzes, and group projects) must be submitted no later than the due date unless prior arrangements are made with the instructor.

- **Penalty for late submission:** If a student submits an assignment after the due date without having made arrangements, **1 point will be deducted for each date.**
- **Deadline Extension:** To request a deadline extension, please contact the instructor **at least 3 days prior to the deadline.**

Make-Up Policy for Missing Quizzes or Group Presentation

Unless students have acceptable reasons for missing quizzes and group project presentations, **the maximum grade the students can receive is half points of their original grade.** For example, if you missed your quiz without prior arrangement, you can receive 50% of your grade when you retake the quiz (e.g., 10 points → 5 points).

Course Technology

The students will be required to have access to and use a personal computer with access to the Internet. Word editing software will be required for written assignments.

The University of Florida and Digital Worlds requires that students have access to and ongoing use of a laptop/mobile computer for DIG courses in order to be able to function in the current learning environment. Digital Worlds requires each student's laptop computer to meet certain minimum specs for heavy graphics use, the requirements documented below must be met. <https://digitalworlds.ufl.edu/programs/ba-in-digital-arts-sciences/technology-requirements/>

Course Communications

Students can communicate directly with the instructor regarding the course material through the course management system (CANVAS) using "Canvas Mail".

Course Recordings

Our class sessions may be audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Creation of Original Content Ethics

For original projects and all assignment deliverables, students should remember that representations of acts of violence, coarse and offensive language, sexual behavior, bodily function and ability, neurodiversity, and personal identity are likely to cause extreme audience response, regardless of the creator's intentions. In addition, the recreation of such actions and subjects for fictional purposes may unintentionally traumatize or negatively impact those who collaborate in the creation of the images. While the university encourages students to explore themes and tell stories that may include this difficult subject matter, they should be cautioned against modes or styles of representation that might be considered unnecessarily offensive or potentially triggering. Instructors, faculty, and university administrators reserve the right to not show or share any student work they feel is inappropriate for their classroom or for public exhibition, as there may be concerns about the impact of such work on the community. We encourage students to consult with their faculty when producing work that might be considered controversial, and to err on the side of being cautious when it comes to making decisions about a project's content - in other words, make the PG-13 version of your story, not the R version, and certainly not the "unrated" version. This is also to help students understand that most professional creative situations have strict guidelines and limitations on such content and how it is produced: your ability to tell stories effectively with "less" is a strong professional skill that will aid in the dissemination of your work to a broader audience.

Course Technology Support

Technology Support Center

The [Technology Support Center](http://digitalworlds.ufl.edu/support) provides computer support for Digital Worlds students who access Zoom, lecture recordings, student equipment, facilities, and other technology-based resources.

<http://digitalworlds.ufl.edu/support>

For computer assistance related to Zoon, lecture recordings, student equipment, and facilities requests please email support@digitalworlds.ufl.edu.

UF Computing Help Desk

For support related to account services, technical consulting, mobile device services, software services, administrative support, application support center, and learning support services, please contact the [UF Computing Help Desk](http://helpdesk@ufl.edu) available 24 hours a day, 7 days a week at 352-392-4357 or helpdesk@ufl.edu.

University Policies

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Class Demeanor

Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Netiquette Communication Courtesy

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats, more information can be found at: <http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf>

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <https://catalog.ufl.edu/UGRD/academic-regulations/ferpa-confidentiality-student-records/>

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>

Campus and Academic Resources

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).

University Police Department: [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).

E-learning technical support: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: [Visit the Student Honor Code and Student Conduct Code webpage for more information](#).

Online Students Complaints: [View the Distance Learning Student Complaint Process](#).

Disclaimer: This syllabus represents the instructor's current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.