User Experience Design

CEN 4722
Class Period: T 1:55-2:45 TH1:55-3:50 Lab Discussion according to schedule
Location: LIT0201
Academic Term: Fall 2021

Contact Information

Instructor: Dr. Sanethia Thomas
Email Address: sanethiat@ufl.edu
- Please allow 48 business hours for response
Office Hours: https://calendly.com/drsanethiathomas/meeting
- Held 30 mins after every class TTH or by appointment with 24 hours advance. *When you book an appointment make sure you provide the topic of discussion.

Teaching Assistants: Joseph Isaac jisaacjr@ufl.edu

Classroom Slack: https://join.slack.com/t/uxdesign-cen4722/shared_invite/zt-kson5z6c-00ZfS~Wsi6_4nuIor0a4Zg -Slack is a place to build community with your peers. Please keep all communication class related, positive and non-offensive. The teaching assistant manages slack.
-All questions, concerns, and official communication intended for and directed to Dr. Thomas should be sent via email.

Canvas Announcements: Announcement notifications should be activated in your settings so you are aware of class announcements in a timely manner.

Course Information

This course introduces students to the methods and tools used in User Experience (UX) and User Interface (UI) design. UXD focuses on the early design stages of a product's lifecycle, and aims to ensure the product will meet user needs; some example tools and methods to be covered include personas, scenarios, storyboards, focus groups, wireframing, prototyping, InVision, Axure, Balsamiq, etc.

This class will serve as an introduction to these methods; no prior design experience is necessary. In this course, students will work on group projects covering one or more of the UXD methods for products designed for today's world of ubiquitous and mobile technology. Students will also participate in a final group project designing for a real context: a local industry client will define their needs and requirements, with the end goal that the students' design will be incorporated into the client's real product. Developers with experience in UX/UI design methods are in high demand in today's software industry, and the projects students work on in this course will strengthen their portfolio.

This course is intended to complement CEN 4721C / CAP 5100 (Human-Computer Interaction), but neither are prerequisites for each other.

The course is hybrid and will be delivered though Hyflex technology. It is organized around online synchronous/face to face lectures and asynchronous lectures.

**We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.*

- *You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.*
- *This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.*
- *Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.*
- *Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.*
- *If you are experiencing COVID-19 symptoms (Click here for guidance from the CDC on symptoms of coronavirus), please use the UF Health screening system and follow the instructions on whether you are able to attend class. Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.*
- *Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. Find more information in the university attendance policies.*

Course Objectives

By the end of the semester students will:

- Define the term "*user experience design*" and identify how it fits into the software development lifecycle.
- Conduct *exploratory* user experience design activities to understand a design space when designing a new user interaction.
- Conduct *generative* user experience design activities to creatively fill user needs when designing a new user interaction.
- Conduct *refining* user experience design activities to select and iteratively improve a design concept for a new user interaction.
- Participate effectively in *design critiques*, and be able to use this experience to be a more effective design team member.
- Design and produce an *interactive prototype* of a complete design concept to present to a client for a new user interaction.

Relation to Program Outcomes (ABET):

Outcome	Coverage*
1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics	Low
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors	Low
3. An ability to communicate effectively with a range of audiences	High
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts	High
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives	High
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions	Medium
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies	High

Course Components

This course involves the following components:

- Online Lectures – video lectures on core user experience design concepts.
- Readings – recent book chapters and online resources related to user experience design.
- Quizzes – online in-class quizzes on the lectures and readings.
- In-Class Activities and Homeworks – group activities to introduce and practice user experience design techniques, similar to lab-style activities. Projects – 1 individual and 2 group projects covering all phases of the user experience design project lifecycle will be completed, including (1) exploring a design space, (2) generating design concepts, and (3) refining design concepts, ultimately producing an interactive prototype for an industry client.
- Critiques – in-class group critiques of the design concepts produced for each project will be conducted, including an end-of-semester public showcase of the interactive prototypes for the final project.

Course Materials

Material and Supply Fees:

• No fees are collected for this course.

Materials Required:

This course makes heavy use of industry methods for designing software. Students are expected to purchase supplies as needed for these methods, including:

Sharpies or other permanent markers
Post-it notes or other sticky notes
Scratch paper of various sizes for sketching (unlined) Pencils, pens
Ruler or straight edge Scissors
(optional)

Textbooks Required:

No textbook is required for this course. Weekly readings in the form of textbook chapters and online resources will be posted to the course website up to four weeks prior to the due date. Students will be responsible for accessing the readings and downloading any relevant links provided.

Textbooks Recommended:

Many readings for the course will be taken from the following books. Students may choose to purchase their own copy of one or more of these textbooks to read beyond the scope of the course. This may be especially useful for students considering UX/UI careers, which make heavy use of UXD methods and concepts.

- *Interaction Design: Beyond Human-Computer Interaction*, by Rogers, Sharp, and Preece, ISBN-10 # 0470665769
- *The Design of Everyday Things*, by Norman, ISBN-10 # 0465050654
- *Sketching User Experiences: Getting the Design Right and the Right Design*, by Buxton, ISBN-10 # 0123740371
- *Sketching User Experiences: The Workbook*, by Greenberg, Carpendale, Marquardt, and Buxton, ISBN-10 # 0123819598

• *Designing for Small Screens: Mobile Phones, Smart Phones, PDAs, Pocket PCs, Navigation Systems, MP3 Players, Game Consoles*, by Studio 7.5, Zwick, and Schmitz, ISBN-10 # 2940373078

- Others TBD

Software Required:

The following free or trial software packages may be necessary to be installed by students on their laptops or used via online services over the course of the semester:

- Balsamiq, by Balsamiq Studios (http://balsamiq.com/)
- Axure RP Pro, by Axure Software Solutions (http://www.axure.com/)
- InVision App, by InVision (http://www.invisionapp.com/)

Most of this software will be made available to students for free as part of the course.

Mobile Computing Requirement

The College of Engineering requires students to have a mobile computing device (laptop) with 802.11 WiFi capability. Preferred methods for public and private communication regarding the course and a method for resolving technical issues (e.g. helpdesk.ufl.edu, 352-392-4357).

Tentative Schedule: subject to change

Week	Dates	**Course Learning Module**	Chapter	Weekly Assignments	Due Date	Quiz (Given on Fridays)
Week 1	8/23	**Introduction Module**	Introduction	CW1	8/26	Practice Quiz
Week 2	8/30	**Module 1: Design Process**	Affordances - Designing for Interaction (week 7)	(1)CW2 (2)Phase 1	(1)9/2 (2)9/9	Quiz 1
Week 3	9/6		Graphic Design	(1)HW1 (2)Phase 2	(1)9/16 (2)9/23	Quiz 2
Week 4	9/13		Brainstorming and Affinity Diagramming	HW2	9/30	Quiz 3
Week 5	9/20		Heuristic Evaluation	(1)CW3 (2)Phase 3	(1)9/23 (2)10/7	Quiz 4
Week 6	9/27		Information Architecture and Wireframing	HW3	10/1	Quiz 5
Week 7	10/4		Individual Project Presentation			No Quiz
Week 8	10/11	**Module 2: Lean UX**	UX Research Methods and Lean UX	Hypothesis Table	10/21	Quiz 6
Week 9	10/18		Pronto Persona, Scenario, Storyboarding	Pronto Persona, Scenario, Storyboarding	10/28	Quiz 7
Week 10	10/25		LoFi Prototyping	LoFi Prototyping	11/4	No Quiz

Week 11	11/1		Interactive Prototyping	Project Work	11/4	Quiz 8
Week 12	11/8		Client Presentation		11/11	Quiz 9
Week 13	11/15		Design Documentation	Project Work	11/18	No Quiz
Week 14	11/22		Thanksgiving Week			No Quiz
Week 15	11/29		Final Presentations	Project Work	12/2	Quiz 10
Week 16	12/6			Project Voting	12/7	

Grading

Information on current UF grading policies for assigning grade points: catalog.ufl.edu/UGRD/academicregulations/grades-grading- policies/. The grade breakdown is as follows:

Grade Category	Percentage	Letter	Range (%)
Individual Project	15%	A	94 – 100
		A-	90 – 93
Industry Client Project	40%	B+	87 – 89
Midpoint (15%)		B	84 – 86
Final (25%)		B-	80 – 83
		C+	77 – 79
Video/ Reading Quizzes	15%	C	74 – 76
		C-	70 – 73
In-Class Small Group Homework	10%	D+	67 – 69
		D	64 – 66
		D-	60 – 63
Online Discussion Post	10%		
Peer Evaluation	10%		
Total	***100%***		

NOTE: A C- will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: an average of C- is equivalent to a GPA of 1.67 and therefore does not satisfy this graduation requirement. For more information on grades and grading policies, please consult the catalog.

Attendance Policy, Class Expectations and Make-Up Policy

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies. Click here to read the university attendance policies:

https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

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 (sccr.dso.ufl.edu/process/student-conduct-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. If you have any questions or concerns, please consult with the instructor or TAs in this class.

****Academic Dishonesty will be dealt with strictly.** Sharing / copying, "borrowing" of code structure, discussing code structure, looking at code from another student or providing such code, and plagiarism, in addition to other dishonest behaviors, are all considered academic dishonesty. Absolutely no information regarding assignment solutions may be shared by students except at a conceptual level. If students implement algorithms from other sources, they must cite those sources.

Students may not copy code from the Internet or other sources under any circumstances. Any student found to have violated these rules, whether a provider or receiver or unauthorized help, will be given a zero and referred to the Honor Court. When in doubt, ask.

Expectations for the Class

Students are expected adhere to the following guidelines in this course:

Students are strongly recommended to listen to all lectures. Requirements for class participation and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

Grade reviews must be requested within one week of a grade being posted. After two weeks, no grade will be revisited. In the event of a grade review, the entire assignment will be reviewed.

Peer Evaluations. Each team member will score their team members and themselves. They are to provide a rating and justification of the rating. A team member who has an average peer evaluation score of 70-79 will receive a 15% penalty for the associated assignments. A team member who has an average peer evaluation score of less than 70 will receive a penalty determined by the professor of the course considering the evaluated contribution and justification provided by their team members.

All assignments are due by the time listed on Canvas. Projects and homework with a cascading deduction: one (1) business day late for 10% penalty; two (2) business days for 30% penalty; or three (3) business days for 60% penalty. Assignments will not be accepted after 3 business days. Quizzes and tests may not be submitted late for credit except with instructor approval for extenuating circumstances (see below).

Exam and quiz make-ups will not be given except in extenuating circumstances. For make-up consideration, students will be required to submit written documentation from a reputable source as evidence. For any planned event, the student is expected to contact the instructor no less than two weeks in advance for consideration. *Please note that there is no guarantee that requests will be accommodated.* Social, networking, and club events may be taken into consideration strictly at the discretion of the instructor.

Requirements for class participation and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
catalog.ufl.edu/UGRD/academicregulations/attendance-policies/

Quizzes may be reviewed during office hours but will not be distributed. Making good assessments takes time and testing. Unfortunately, some disreputable organizations and companies attempt to compromise exams to give some students an edge for a fee. To combat this, we will always allow students to review quizzes and exams during office hours but will not release them en masse.

Students should arrange for project help and grade questions during office hours. Students should make plans to meet with the Peer Mentors and Teacher Assistants during scheduled office hours or try to arrange an appointment with the TA. Do not send email to, send private messages to, or "@" instructors or TAs about grades.

All correspondence should be engaged via email. In particular, Slack or Piazza is helpful for general questions and for students to help one another, but students should not expect a response to important questions via chat. Slack and Piazza will be managed by Peer Mentors and Teacher Assistants. **For matters directed to the professor, email the professor directly**. Please allow 48 business hours for a response.

Student Assistance

The following services are available to students requiring assistance:

Accommodations for Students with Disabilities – Students Requesting accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.

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.

UF Counseling Services – Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

- Career Resource Center, Reitz Union, 392-1601, Career development assistance and counseling
- University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling
- SHCC mental Health, Student Health Care Center, 392-1171, personal counseling
- Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161, sexual assault counseling.

Software Use Policy

All faculty, staff and student 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.

Evaluations

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 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 ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at gatorevals.aa.ufl.edu/public-results/ .

Academic Resources

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: Career assistance and counseling services *career.ufl.edu/*

Library Support: cms.uflib.ufl.edu/ ask various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: General study skills and tutoring. teachingcenter.ufl.edu/

Writing Studio: writing.ufl.edu/writing-studio/http://writing.ufl.edu/writing-studio/

Student Complaints On-Campus: sccr.dso.ufl.edu/policies/student-honor- code- student-conduct-code/

On-Line Students Complaints: distance.ufl.edu/student-complaint-process/ /

Health and Wellness

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

Counseling and Wellness Center: Visit counseling.ufl.edu/ 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 shcc.ufl.edu/.

University Police Department: Visit police.ufl.edu/ 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, ufhealth.org/emergency-room-trauma-center.