

## User Experience Design

CEN 4722 Section 11066

**Class Periods:** Mondays, Wednesdays, and Fridays, Period 3, 9:35 AM – 10:25 AM

**Location:** CSE E121

**Academic Term:** Fall 2024

### **Instructor:**

Andrew Maxim

[amaxim@ufl.edu](mailto:amaxim@ufl.edu)

Office Phone Number: n/a

Office Hours: Mondays, 10:40 AM – 11:30 AM (4<sup>th</sup> period), Zoom Link:

<https://ufl.zoom.us/j/99854214915?pwd=hzjyyIV4ZclO14Xjb9KzU9QUKAcnxW.1>

### **Teaching Assistant/Peer Mentor/Supervised Teaching Student:**

Please contact through the Canvas website

- TBA

### **Course Description**

Introduces methods and tools used in User Experience Design (UXD): the early stages of software design focused on meeting user needs. Key concepts include user research, contextual design, design thinking, ideation, iterative design, prototyping, and design documentation. Projects utilize software tools used in the industry. (Credits: 3)

### **Course Pre-Requisites / Co-Requisites**

COP 3530. Communicate with the instructor if you want to discuss the adequacy of prior training. A recommendation for student background is familiarity with technology and computing, similar to that obtained with a computing, engineering, or technical undergraduate degree.

Notes. Prior design experience is optional for this class. This course will require students to work on a final group project designed to solve an identified problem. 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 portfolios. This is the undergraduate version of the UX Design course.

### **Course Objectives**

By the end of this course, students should be able to:

- Define the term “user experience design” and identify how it fits into the software development lifecycle.
- Understand critical concepts in interaction design
- Critically analyze technologies in terms of the concepts of interaction design
- 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 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 the class for new user interaction.

### **Materials and Supply Fees**

A fee is charged for the course for materials provided to students for class activities.

## Required Textbooks and Software

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 three weeks before the due date. Students will be responsible for accessing the readings and downloading any relevant links provided.

## Recommended Materials

Many readings for the course will be taken from the following books. Students may choose to purchase a 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 heavily use UXD methods and concepts.

- Interaction Design: Beyond Human-Computer Interaction, by Rogers, Sharp, and Preece, John Wiley & Sons. ISBN-10 # 0470665769
- The Design of Everyday Things, by Norman, ISBN-10 # 0465050654
- The UX Book: Process and Guidelines for Ensuring a quality user experience, by Hartson, R., & Pyla, P. S. Elsevier.

Other useful books:

- 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

## Required Computer

UF student computing requirement: <https://news.it.ufl.edu/education/student-computing-requirements-for-uf/>  
Students are expected to bring a personal computing device with them (laptop/tablet) to every class to complete in-class assignments and quizzes.

## Course Schedule

Week 1: Course Introduction • Aug 23	• Course Introduction and Syllabus	
Week 2: UXD Overview • Aug 26-30	• Introduction to UXD • Affordances • History of Usability	• <a href="#">User Experience and Design</a> • <a href="#">Affordances</a>
Week 3: Theory • Sep 4-6 (No Class Sep 2)	• Usability and User Experience • Process Models	• <a href="#">First Principles of Interaction Design</a>
Week 4: Concepts and Principles • Sep 9-13	• Design Critiques • Interaction Concepts • Gestalt Principles	• <a href="#">Design Critique</a> • <a href="#">Gestalt Principles (1)</a> • <a href="#">Gestalt Principles (2)</a> • <a href="#">Gestalt Principles (3)</a>
Week 5: Project Set-Up • Sep 16-20	• Defining the Problem • Form Teams • Conducting User Interviews	• <a href="#">User Interviews</a>
Week 6: Web Designing Tools • Sep 23-27	• Exploring Platforms • Class Presentations (Projects)	
Week 7: Identifying Relationships • Sep 30-Oct 4	• Affinity Diagrams • Thematic Analysis	• <a href="#">Affinity Diagramming</a> • <a href="#">Thematic Analysis</a>
Week 8: User Personas • Oct 7-11	• User Needs • User Personas	• <a href="#">User Needs 3 Persona Type</a>
Week 9: Scenarios	• User Scenario Construction	• <a href="#">Scenarios</a>

• Oct 14-16 (No Class Oct 18)	• Class Presentations (Scenarios)	
Week 10: Storyboards • Oct 21-25	• Project Storyboard Construction • Class Presentations (Storyboards)	• <a href="#">Storyboards</a>
Week 11: User Flows • Oct 28-Nov 1	• User Flows • Task Flows • Wireframes	• <a href="#">Wireframing</a> • <a href="#">Wireflow</a>
Week 12: Prototyping • Nov 4-8	• Prototyping Software (FIGMA) • Instructor/TA Feedback	• <a href="#">UX Prototypes: Low Fidelity vs. High Fidelity</a>
Week 13: User Feedback • Nov 13-15 (No Class Nov 11)	• User Testing w/Dynamic Prototypes • Class Feedback	• <a href="#">Quantitative vs. Qualitative</a> • <a href="#">Usability Testing</a>
Week 14: • Nov 18-22	Final Project Presentations	
Thanksgiving Break • Nov 25-29		
• Week 15: Dec 2-4	Final Project Presentations (overflow)	

### Important Dates

Sep 2	Labor Day (No Class)
Sep 27	<b>Submit:</b> Project Proposal
Oct 11	<b>Submit:</b> Affinity Diagrams, Thematic Analysis, User Personas, 3 User Interviews
Oct 18	<b>Submit:</b> Scenarios
Oct 18	Homecoming (No Class)
Oct 25	<b>Submit:</b> Storyboards
Nov 1	<b>Submit:</b> User Flows, Task Flows, Wireframes, 3 User Interviews
Nov 8	<b>Submit:</b> Low Fidelity Prototype, 3 User Interviews
Nov 11	Veterans Day (No Class)
Nov 15	<b>Submit:</b> Project Presentation Slides
Nov 23	<b>Submit:</b> Final Project Materials
Nov 25-29	Thanksgiving Break (No Class)

### Attendance Policy, Class Expectations, and Make-Up Policy

Students are expected to attend all classes. If a student misses a session and is unable to provide the documentation required for an excused absence, the student will need to consult with other members of the class to determine what was missed and to request guidance from the instructor regarding missed content. There is no provision for making up missed class participation credit for an unexcused absence.

Excused absences must be consistent with university policies in the Graduate Catalog (<https://catalog.ufl.edu/graduate/regulations>) and require appropriate documentation. Additional information can be found here:

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

### Evaluation of Grades

Assignment	Total Points	Percentage of Final Grade
In-class Activities	50	25%
Reading Quizzes	50	25%
Team Project	100	50%
		100%

## ***Grading Policy***

<b>Percent</b>	<b>Grade</b>	<b>Grade Points</b>
93.4 - 100	A	4.00
90.0 - 93.3	A-	3.67
86.7 - 89.9	B+	3.33
83.4 - 86.6	B	3.00
80.0 - 83.3	B-	2.67
76.7 - 79.9	C+	2.33
73.4 - 76.6	C	2.00
70.0 - 73.3	C-	1.67
66.7 - 69.9	D+	1.33
63.4 - 66.6	D	1.00
60.0 - 63.3	D-	0.67
0 - 59.9	E	0.00

More information on UF grading policy may be found at:  
<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

## ***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.

## ***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/>.

## ***In-Class Recording***

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by

a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

### ***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://sccr.dso.ufl.edu/process/student-conduct-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.

### ***Commitment to a Safe and Inclusive Learning Environment***

The Herbert Wertheim College of Engineering values varied perspectives and lived experiences within our community and is committed to supporting the University’s core values, including the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information, and veteran status.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Undergraduate Coordinator
- HWCOE Human Resources, 352-392-0904, [student-support-hr@eng.ufl.edu](mailto:student-support-hr@eng.ufl.edu)
- Pam Dickrell, Associate Dean of Student Affairs, 352-392-2177, [pld@ufl.edu](mailto:pld@ufl.edu)
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, [nishida@eng.ufl.edu](mailto:nishida@eng.ufl.edu)

### ***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://registrar.ufl.edu/ferpa.html>

### ***Campus Resources:***

#### ***Health and Wellness***

##### **U Matter, We Care:**

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

**Counseling and Wellness Center:** <https://counseling.ufl.edu>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

**Sexual Discrimination, Harassment, Assault, or Violence**

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the **Office of Title IX Compliance**, located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, [title-ix@ufl.edu](mailto:title-ix@ufl.edu)

**Sexual Assault Recovery Services (SARS)**

Student Health Care Center, 392-1161.

**University Police Department** at 392-1111 (or 9-1-1 for emergencies), or <http://www.police.ufl.edu/>.

***Academic Resources***

**E-learning technical support**, 352-392-4357 (select option 2) or e-mail to [Learning-support@ufl.edu](mailto:Learning-support@ufl.edu).  
<https://elearning.ufl.edu/>.

**Career Connections Center**, Reitz Union, 392-1601. Career assistance and counseling; <https://career.ufl.edu>.

**Library Support**, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

**Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.  
<https://teachingcenter.ufl.edu/>.

**Writing Studio, 302 Tigert Hall**, 846-1138. Help brainstorming, formatting, and writing papers.  
<https://writing.ufl.edu/writing-studio/>.

**Student Complaints Campus**: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>; <https://care.dso.ufl.edu>.

**On-Line Students Complaints**: <https://distance.ufl.edu/getting-help/>; <https://distance.ufl.edu/state-authorization-status/#student-complaint>.