

## User Experience Design

CEN 5728

**Class Periods:** Mondays, Wednesdays, and Fridays, 5th period, 11:45 AM - 12:35 PM

**Location:** LIT 0113

**Academic Term:** Fall 2023

### **Instructor:**

Benjamin Lok

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

Office Phone Number: n/a

Office Hours: Mondays, 10:40-11:30 (4th period), CSE544 (and eventually) DSIT 5117

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

Please contact through the Canvas website

- Andrew Maxim, [amaxim@ufl.edu](mailto:amaxim@ufl.edu), Tuesday, 10:40-11:30 (4th period), CSE309

### **Course Description**

*Catalog 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. Software tools used in industry are used in class projects.

*Notes.* **No prior design experience is necessary for this class.** This course will require students to work on a final group project, designing solutions to identified problems. 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 graduate version of the UX Design course.

### **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.

### **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 key concepts in interaction design
- Critically analyze technologies in 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 fill user needs when creatively 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 a client.

### **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 important research papers and online resources will be posted to the course website up to two 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 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

### **Course Schedule**

#### **Tools Phase**

Week 1 - (8/23) (Course Intro Week):	<ul style="list-style-type: none"><li>● W - Course Introduction and Syllabus</li><li>● F - Introduction to UXD</li></ul>	
Week 2 (8/ 28 - UXD overview week):	<ul style="list-style-type: none"><li>● M - History of Usability</li><li>● W - HURRICANE DAY</li><li>●</li></ul>	<b>Reading:</b> <a href="#"><u>User Experience and Experience Design</u></a>
Week 3 (9/ 4 - Theory Week):	<ul style="list-style-type: none"><li>● <b>M - Labor Day NO CLASS</b></li><li>● W - Usability &amp; User Experience</li><li>● F - Process Models</li></ul>	<b>Reading:</b> <a href="#"><u>Design Critiques</u></a>
Week 4 (9/11 - Set-up for project week):	<ul style="list-style-type: none"><li>● M -Design Critiques</li><li>● W - Interaction Concepts</li><li>● F - Interaction Concepts and Gestalt Principles</li></ul>	<b>Reading:</b> <a href="#"><u>First Principles of Interaction Design</u></a>  <a href="#"><u>Gestalt Principles (1)</u></a> <a href="#"><u>Gestalt Principles (2)</u></a>

		<u><i>Gestalt Principles (3)</i></u>
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**Individual Phase**

Week 5 (9/18):	<ul style="list-style-type: none"> <li>• M - Interaction Concepts</li> <li>• W - Interaction Concepts</li> <li>• F - Industry Client Project</li> </ul>	<p><b>Reading:</b> <u><i>User Interviews</i></u></p> <p><b>Watch:</b>  <a href="https://www.youtube.com/watch?v=FjB_e7U01hc">https://www.youtube.com/watch?v=FjB_e7U01hc</a> (13 m)  <a href="https://www.youtube.com/watch?v=pvIN9STpzCQ&amp;t=2s">https://www.youtube.com/watch?v=pvIN9STpzCQ&amp;t=2s</a> (8 m)</p>
Week 6 (9/25):	<ul style="list-style-type: none"> <li>• M - Industry Client Project</li> <li>• Review ideas, speed dating for teammates</li> <li>• W - Defining the Problem</li> <li>• F - User Interviews</li> <li>• <b>Get assigned to projects</b></li> </ul>	<p><b>Watch:</b>  <a href="https://www.youtube.com/watch?v=5tVbFfGDQck">https://www.youtube.com/watch?v=5tVbFfGDQck</a> (9 m)</p>

**Group Phase**

Week 7 (10/2 - Cycle 0 - Affinity Diagram and Personas):	<ul style="list-style-type: none"> <li>• M - Affinity Diagramming</li> <li>• W - User Needs</li> </ul> <p><b>Friday - Homecoming NO CLASS</b></p>	<u><i>Affinity Diagramming Thematic Analysis</i></u>
Week 8 (10/9):	<ul style="list-style-type: none"> <li>• M - User Needs</li> <li>• W - Storyboard.that introduction</li> <li>• F - Task Flows and User Flows</li> </ul> <p><b>Turn in Pirate Code, Lean UX Canvas</b></p>	
Week 9 (10/16 - Cycle 1 - Scenarios and Storyboards):	<p>M - Team Support -  W - Task Flows and User Flows  F - Team time</p>	
Week 10 (10/23):	<p>M - Low-fidelity prototypes  W - Low-fidelity prototypes  F - Feedback Friday  Turn in User Personas, Affinity Diagrams, Storyboards, User Interview</p>	<u><i>UX Prototypes: Low Fidelity vs. High Fidelity</i></u>
Week 11 (10/30 - Cycle 2 - Static Prototypes)	<p>M - high-fidelity prototypes  W - Figma Intro  F - Team time  Turn in Cycle 1 peer reviews</p>	

Week 12 (11/6):	M - high-fidelity prototypes W - Plagiarism F - Veterans Day - No Class Turn in Task flows, Low-fidelity paper prototype, and user feedback on task flows and low-fidelity prototype	<u><a href="#">Quantitative vs. Qualitative Usability Testing</a></u>
Week 13 (11/13 - Cycle 3 - Dynamic Prototypes):	M - Design Licenses W - F - Team time Turn in Cycle 2 peer reviews	
Week 14 (11/20)	M - Team time Wednesday and Friday - Thanksgiving Week NO CLASS	
Week 15 (11/27)	M - reflection of lessons learned W - UX Design & AI F - Feedback Friday Turn in High-fidelity figma prototype v1, user interviews, user feedback on high-fidelity prototype	
Week 16: (12/4 - Cycle 4 - Dynamic Prototype)	M - Demo showcase W - Demo showcase Turn in Cycle 3 peer review	
Week 17: 12/12/23 3-5 PM	Turn in High-fidelity figma prototype v2, user interviews, Cycle 4 peer review	

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

**Students are expected to attend all classes.** There will be no monitoring or grading of attendance. 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://gradcatalog.ufl.edu/graduate/regulations/>.

For excused absences, the student should **email both the instructor and the TA**. 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.

For unexcused absences, there is **no provision for making up missed class participation credit**.

### ***Evaluation of Grades***

<b>Assignment</b>	<b>Total Points</b>	<b>Percentage of Final Grade</b>
In-class activities	<b>20 (dropping lowest score)</b>	20%
Reading Quizzes	30	30%
Team Project	50	50%
		100%

### ***Grading Policy***

The following is given as an example only.

<b>Percent</b>	<b>Grade</b>	<b>Grade Points</b>
91.5 - 100	A	4.00
89.5 - 91.4	A-	3.67
87.5 - 89.4	B+	3.33
81.5 - 87.4	B	3.00
79.5 - 81.4	B-	2.67
77.5 - 79.4	C+	2.33
71.5 - 77.4	C	2.00
69.5 - 71.4	C-	1.67
67.5 - 69.4	D+	1.33
61.5 - 67.4	D	1.00
59.5 - 61.4	D-	0.67
0 - 59.4	E	0.00

### ***Research Participation and Extra Credit***

As part of this course, you are eligible to earn extra credit by participating in Digital Worlds or CISE human-subjects research studies. Each study participated in will be worth 1-2%, and students can earn up to 1% extra credit on their final course grade. Participation in human-subjects studies will be handled by the CISE department's Research Participant System which can be accessed at <https://ufl-cise.sona-systems.com>. To view and sign up for a study, log in to the system using your GatorLink username and password. Once you have successfully logged in, you will be able to see a list of studies with available timeslots. If there are no studies listed, there are currently no opportunities to participate, and you should check back later. Since the system works on a first-come basis, it is recommended you do not wait until the end of semester when the number of timeslots is limited.

If you schedule an appointment for a study, it is your responsibility to show up or cancel at least 24 hours before the appointment. Multiple unexcused absences will lock you out of the system. In addition, it is your responsibility to assign earned credits to the correct course. At the end of the semester, your instructor will be provided a history of your participation for grading purposes. For assistance with the Research Participation System, please view the Frequently Asked Questions located at [https://ufl-cise.sona-systems.com/faq\\_view.aspx](https://ufl-cise.sona-systems.com/faq_view.aspx).

Participation in a study for extra credit is optional but strongly encouraged. A replacement extra credit activity of reading and analyzing a set of three UX design papers chosen in conjunction with the TA will be worth 1%.

### ***Late Assignments***

**There is a 25% penalty for submissions that are late (maximum 2 business days/48 hours after the initial deadline).** Requests for extreme circumstances must be requested in writing before the due date. Exemptions require instructor approval. Requirements for class attendance are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

### ***Incompletes***

**Incompletes will not be granted except under previous agreement of the professor.** To be considered for an incomplete, the student \*must\* 1) let a professor know in advance that they are seeking an incomplete, and 2) provide documentation to support the request.

More information on UF grading policy may be found at:

[UF Graduate Catalog](#)

[Grades and Grading Policies](#)

### ***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 Graduate Program Coordinator
- HWC OE Human Resources, 352-392-0904, [student-support-hr@eng.ufl.edu](mailto:student-support-hr@eng.ufl.edu)
- Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, [taylor@eng.ufl.edu](mailto:taylor@eng.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. <https://lss.at.ufl.edu/help.shtml>.

**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>.