

DIG4905 Principles of Interactivity and Usability

Instructor

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Canvas Email

Office Location

Room 116
Norman Gym

Office Hours

Tuesday
11 AM – 12PM

Course Number

DIG4905

Semester/Year

Spring 2020

Course Credits

3 credits

Course Location

NRG 205 (PICT)

Course Meeting Times

Mon Period 7
Wed Periods 7-8

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 the entire journey of the UI/UX design process—from identifying target users to developing a prototype. Topics include, but 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 digital applications. Please note that the group project is 45% of your grade. Students should be comfortable working in an interdisciplinary group.

Pre-Requisites

This class has no pre-requisites.

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

- Identify problems of existing digital interfaces
- Understand needs of key stakeholders and provide design solutions tailored to those needs.
- Consider cognitive, emotional, and social aspects of interaction and understand their implications for user satisfaction
- 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

Required Materials

- **Textbook:** Interaction Design: Beyond Human-Computer Interaction (5th Edition), By Sharpe, Rogers, and Preece, Wiley & Sons
Available in both digital form (e.g. Kindle) and paper copy
ISBN-13: 978-1119547259
ISBN-10: 1119547253
- **Optional Reading:**
The Design of Everyday Things (2013), By Don Norman
Don't Make Me Think, Revisited (2014), By Steve Krug

Course Schedule

This schedule is only a guide and is subject to change. Unless otherwise indicated, assignments and readings are due the day they are listed on the syllabus, not the following day.

Week	Subject	Quizzes	Assignments
Week 1	Course Introduction and Overview <ul style="list-style-type: none"> What is UI and UX? 		
Week 2	Process of Interaction Design <ul style="list-style-type: none"> Design thinking 4 steps in interaction design 		
Week 3	Features of Good Design <ul style="list-style-type: none"> Affordance, signifier, and feedbacks Conceptual model 		
Week 4	Visual Design and Information Design <ul style="list-style-type: none"> Visual elements Information design principals 	Quiz 1	Assignment 1 (Individual)
Week 5	User Interaction and User Interface <ul style="list-style-type: none"> Types of user interaction, user input Types of user interface, UI components 		
Week 6	Understanding Users <ul style="list-style-type: none"> Identify stakeholders and user needs Contextual inquiry and observation 		Assignment 2: Project Proposal (Group)
Week 7	User Journey <ul style="list-style-type: none"> Mapping the user journey Finding solutions and understanding constraints 		
Week 8	Mockups and Prototype <ul style="list-style-type: none"> Story board and flow diagram Sketch and wireframe 	Quiz 2	Assignment 3 (Group)
Week 9	Spring Break		
Week 10	High-fidelity Prototypes <ul style="list-style-type: none"> Prototyping tools for UI/UX designers 		
Week 11	Web Development <ul style="list-style-type: none"> HTML, CSS, JavaScript 		Assignment 4 (Individual)
Week 12	User Testing <ul style="list-style-type: none"> Experiment design User study method 		
Week 13	Data Analysis <ul style="list-style-type: none"> Types of measures Data analysis, Interpretation, and Presentation 		Assignment 5 (Group)
Week 14	Heuristic Evaluation <ul style="list-style-type: none"> Usability heuristic for user interface design 		
Week 15	Topics in UI/UX design <ul style="list-style-type: none"> Emotional design 	Quiz 3	
Week 16	Group Project Presentation		Group Project Report

Evaluation of Grades

Assignment	Total Points	% of Grade
Class Participation and Attendance – Students are expected to actively participate in class discussions, both in class as well as in course online forums and outside class Group meetings.	100	10%
Quizzes – Students will have a quiz hosted through Canvas. Quiz materials include lectures, assignments, readings, and other external resources.	150	15%
Individual Assignments – To demonstrate your mastery of concepts of interaction design, students will complete two individual assignments. All assignments must be conducted independently, unless otherwise stated by the instructor. Detailed assignment descriptions and instructions will be posted on the Canvas.	300	30%
Group Assignments and Final 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 a usability testing. The group project will consist of several different components, the full descriptions of which will be posted on the Canvas. Each component must be conducted and submitted as a group.	450	45%

Grading Scale

Letter Grade	% Equivalency	GPA Equivalency
A	94 – 100%	4.0
A-	90 – 93%	3.67
B+	87 – 89%	3.33
B	84 – 86%	3.00
B-	80 – 83%	2.67
C+	77 – 79%	2.33
C	74 – 76%	2.00
C-	70 – 73%	1.67
D+	67 – 69%	1.33
D	64 – 66%	1.00
D-	60 – 63%	.67
E, I, NG, S-U, WF	0 – 59%	0.00

More information on grades and grading policies is here:

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

Materials and Supply Fees

Material and supply and equipment use fee information is available from the academic departments or from the schedule of courses (Florida Statutes 1009.24). The total course fee for this class is \$0.00.

The total course fee for each course is listed on the UF Schedule of Courses. (<https://registrar.ufl.edu/soc/>).

Course Polices

Attendance Policy, Class Expectations, and Make-Up Policy

We value participation more than mere attendance. The instructor is responsible for communicating the specific details of what percentage of your grade (if any) will be assigned to participation, and how class participation will be measured and graded. Interaction with your peers and the instructor will empower you to greater achievement.

State whether attendance is required and if so, how will it be monitored? What are the penalties for absence, tardiness, cell phone policy, laptop policy, etc. What are the arrangements for missed homework, missed quizzes, and missed exams?

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

Course Technology

The students will be required to have access to and use a personal computer with the 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 on-going 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.

DW Technology Requirements: <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 Technology Support

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 request please [Submit a Help Ticket](#) or email support@digitalworlds.ufl.edu.

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](#) available 24 hours a day, 7 days a week at 352-392-4357 or helpdesk@ufl.edu.

UF 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 requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure 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: <http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>

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 Resources

U Matter, We Care:

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

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

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/>.

E-learning Technical Support

352-392-4357 (select option 2) or e-mail to Learning- learning-support@ufl.edu

Career Connections Center

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

Library Support

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

<http://cms.uflib.ufl.edu/ask>

Teaching Center

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

Writing Studio

2215 Turlington Hall, 846-1138. Help brainstorming, formatting, and writing papers.

<http://writing.ufl.edu/writing-studio/>

Student Complaints Campus

<http://regulations.ufl.edu/wp-content/uploads/2012/09/1.0063.pdf>

Online Students Complaints

<http://www.distance.ufl.edu/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.