

**ICS-664: Advanced Human-Computer Interaction**  
Spring 2024 Course Syllabus

**Course Description:** This course will address advanced topics of design and evaluation in Human-Computer Interaction. We will combine topics about HCI research, User Centered Design, and Tangible User Interfaces.

**Instructor:** Dr. Nurit Kirshenbaum / Email [nuritk@hawaii.edu](mailto:nuritk@hawaii.edu)

**Office hours:** email for appointment

**Reading:**

Selected papers and selected chapters from:

- Norman, D. (2013). The design of everyday things. Revised and expanded edition.
- MacKenzie, I. Scott. (2013) Human-Computer Interaction an Empirical Research Perspective. 1st edition, Morgan Kaufmann.

(Ebook available from the library

[https://uhawaii-manoa.primo.exlibrisgroup.com/permalink/01UHAWAII\\_MANOA/1s77obg/alma9910786884305681](https://uhawaii-manoa.primo.exlibrisgroup.com/permalink/01UHAWAII_MANOA/1s77obg/alma9910786884305681) )

**Schedule:** Lectures are held on Mondays 3:00-5:30 PM, Keller 103

**Class Format:** Class format includes the following:

1. Every class (Monday) you will get an assigned reading due the following Monday, the reading is mandatory.
2. There is a question accompanying the reading instructions, you should answer it on laulima on the Thursday before it is due.
3. Every class will include a discussion about the readings and student answers. This discussion will be led by 1 or 2 of the students and should take around 50 minutes. Register ASAP to lead a lecture in this document (You **MUST** lead one session) [https://docs.google.com/spreadsheets/d/1IkVJQRRmVtTVbfsGi2nbkEm\\_7s6ZHhI8\\_6uRlN2S1JA/edit#gid=0](https://docs.google.com/spreadsheets/d/1IkVJQRRmVtTVbfsGi2nbkEm_7s6ZHhI8_6uRlN2S1JA/edit#gid=0)
4. Every class will include an activity such as brainstorming, tutorials, or project related activities. You will split into groups to work on these activities and report back to the rest of the class in the last ~20 minutes. Make sure one of the group members take notes during the activity, you will be asked to submit them on laulima on the day of the activity (There are no requirements for these notes, they are merely noted as indication of in-class work).
5. The class involves a semester-long project done in groups of 2 or 3 students and culminating in a paper written in conference format. Various milestones associated with the project should be submitted on the Thursday of the week as mentioned in the schedule below.

All laulima submissions should be submitted by 10PM.

**Course Website:** I will use laulima as a repository for files and assignments. Please install SAGE3 from <https://sage3.sagecommons.org>. We will use the SAGE3 board `sage3://sage3.manoa.hawaii.edu/#/enter/b93cf2d0-958e-4ecd-9fd9-348ac3c9b11f/c83c41f6-391d-4548-b5bd-9008915a0081`

You will need to “join” the room to add it to your sage home page.

**Learning Objectives:**

- Understand basics of HCI research
- Understand the fundamentals of HCI theory
- Learn and use methods of user centered design
- Identify, summarize, and apply scholarly research in the design process
- Analyze qualitative data to understand user needs
- Create personas to aid in designing prototypes
- Translate user needs to sketch and prototypes
- Design and ethically conduct user studies
- Practice giving design critiques to classmates
- Respond to feedback given in design critiques
- Present the design process in presentations
- Practice academic writing

**Schedule (may be subject to change):**

Lecture #	Date	Topic	In-Class Activity	Project
1	01/08/24	Introduction	Brainstorming	
	01/15/24	No class		
2	01/22/24	History	Lit Review How-To	
3	01/29/24	Ucd Process	Brainstorming	Project Pitches (2/1)
4	02/05/24	Everyday Things	Analyze Objects	
5	02/12/24	Human Factors	Prototyping How-To	Prototype Plan (2/15)
	02/19/24	No class		
6	02/26/24	Design Principles	Personas	
7	03/04/24	Interaction	Cognitive Walkthrough	Lit Review (3/7)
8	03/11/24	Prototyping	Prototype #1	
	03/18/24	No class		
9	03/25/24	Research Design	Brainstorming	Research Plan (3/28)
10	04/01/24	Quantitative Analysis	User Study #1	
11	04/08/24	Qualitative Analysis	Prototype #2	
12	04/15/24	Extra Topics	User Study #2	Research Observations (4/18)

13	04/22/24	Writing Papers	Writing Exercise	
14	04/29/24	<b>Presentations</b>	<b>Presentations</b>	
	05/01	Last Day Of Instruction		
	05/10	End Of Finals Week		Project Paper (5/9)

**Grading:** Your final grade for this course will be calculated as follows

- Attendance: 10%
- In-Class Activities: 15%
- Reading responses: 10%
- Leading discussion: 20%
- Project: 45% (partitioned to various components)

**Expectations:** to fulfill all the work for this course, the student is expected to perform the following:

- Attending class: there are 14 formal lectures for the class. You may miss up to 3 of them (no need to provide me with a reason, but I do expect to be notified). Any classes missed beyond that will affect your grade regardless of the reason for the absence. Manage your time wisely.
- In-Class Activities: there are 12 activity sessions. If you miss any (see the point above about attendance) it is your responsibility to contact your group or other students in the class to see what was done and/or participate after the fact. You are still expected to submit an activities note, if not, if you miss more than 3 submissions it will affect your grade regardless of the reason for the absence.
- Reading responses: these are the answers you write towards the weekly discussion as well as your participation in the discussion during class time.
- Leading discussion: in your turn you will need to lead the class discussion which comprises a 1) summary of the reading, 2) prompting your classmates to explain their reflections, and 3) considering the written answers for the weekly question. As a discussion leader you will need to manage time and make sure all students are sharing their views (even/especially the shy ones). You are welcome to discuss your leadership discussion with me in advance.
- Project: the project has 6 milestones that should propel you through the design and study of a tangible user interface and writing a conference style paper about your efforts. You are expected to form groups of 2/3 as soon as possible. You will get instructions about the requirements of each milestone. The milestones are (adding up to 45%):
  - Project Pitch (5%)
  - Prototype Plan (5%)
  - Lit Review (10%)
  - Research Plan (5%)
  - Research Observations (10%)
  - Project Paper (10%)

- You will also present your work to your classmates in the final week of the semester, but this will fall under the in-class activity.

**Absences and Lateness Policy:** There is built-in leniency towards absences and any additional absences will affect your grade (and will mean you have missed over a fifth of the class!). Late submissions of up to 2 days with advance notification (tell me first) will be approved as needed. Excessive late submissions will result in grade reduction.

Grades in this course will not be curved. Scaling of assignment scores may be done if necessary; if this occurs, everyone will have their grade increased by the same amount. A weighted average will be applied (as shown above) and final grades will be assigned as follows: A = 90%-100%, B = 80%-89%, C = 70%-79%, D = 60-69%, F=<60%. Grades in the “gray area” between grades will be determined by your participation and trends (improving or declining) over the semester.

## Policies and Resources

1. **Attendance policy:** *Students who are enrolled in this course, but never attend will be flagged by the course instructor for non-participation before the last day to add/drop (for 100% tuition refund) deadline. Flagged students will be administratively dropped by the Office of the Registrar. Any changes to a student’s enrollment status may affect financial aid eligibility and can result in the return of some of all of federal student financial aid. (specify for your course; may also be covered under Grading section)*
2. **Statement on Disability: KOKUA Program** If you have a disability and related access needs, please contact the KOKUA Program (Office for Students with Disabilities) at 956-7511, KOKUA@hawaii.edu, or go to Room 013 in the Queen Lili’uokalani Center for Student Services. Please know that I will work with you and KOKUA to meet your access needs based on disability documentation. Kokua’s services are confidential and offered free of charge.
3. **Academic Integrity and Ethical Behavior: Office of Student Conduct** (recommended text) Cheating, plagiarism, or other forms of academic dishonesty are not permitted within this course and are prohibited within the System-wide Student Conduct Code (EP 7.208). Examples include: fabrication, facilitation, cheating, plagiarism, and use of improper materials. Any incident of suspected academic dishonesty will be reported to the Office of Student Conduct for review and possible adjudication. Additionally, the instructor may take action in regards to the grade for the deliverable or course as they see fit.
4. **Office of Title IX:** (808) 956-2299 / [t9uhm@hawaii.edu](mailto:t9uhm@hawaii.edu) / <https://manoa.hawaii.edu/titleix/>
5. **Department of Public Safety:** (808)956-6911 (Emergency) / (808)956-8211 (Non-Emergency) <http://manoa.hawaii.edu/dps/>
6. **UH System Basic Needs** include food and housing, childcare, mental health, financial resources and transportation, among others. Student basic needs security is critical for ensuring strong academic performance, persistence and graduation and overall student

well being. If you or someone you know are experiencing basic needs insecurity, please see the following resources: [UH System Basic Needs](#)