

Syllabus for ICS 466: Design for Mobile Devices

Instructor: Kim Binsted
Email: binsted@hawaii.edu
Phone: 808-956-6107
Office: POST 303D
Office hours: TBD or by appointment (preferred)
Class page: Laulima and <https://binsted.github.io/ics466-fall2024/>
TA: Anika Rahman Joyita (arjoyita@hawaii.edu or by appointment)

1. Purpose and Objectives

Internet-enabled mobile devices, such as cell phones and wearables, are now common. This course helps students understand the relevant issues in designing for such devices, and teaches them about standards, practices, programming languages and operating systems for mobile devices. It also encourages students to think about how non-technical issues – business models, cultural attitudes, and so on – can affect mobile design. The course is organized around a term project, in which students design, implement and test a mobile-oriented service or site. Students are encouraged to adopt an entrepreneurial attitude towards their projects, and should consider target markets, revenue streams etc., as well as technical and design issues.

Learning Objectives:

- An understanding of the current state of the mobile industry, and its likely near future.
- An understanding of the history of mobile devices, platforms, software, carriers, infrastructure and markets.
- An understanding of the principles of design for mobile devices, and of how those principles are applied on currently available mobile platforms.
- The ability to plan, design and implement a mobile application, site or service.
- The ability to give a clear and concise verbal description of a mobile application, site or service (i.e. an “elevator pitch”).
- The ability to storyboard, film, narrate and edit a short video on a mobile application, site or service.
- The ability to write clearly, professionally and effectively.

Please note that this course will not teach programming as such. Instead, students are expected to adapt their existing programming skills to mobile devices, with guidance from the professor, learning new skills from online resources as necessary.

2. Organization

Readings and Postings: On the Monday of each week (starting in Week 2), the professor will post a Reading or Experience on the course website (see above) and on Laulima. By Wednesday, you must write a substantial (> 250 words) post about the reading/task on

Laulima, under a thread entitled “[Your Name] Week [N]”. By Friday, you must write a review of your assigned reviewee’s post, in their thread (see “Matrix.pdf” under Resources on Laulima to determine your assigned reviewee for the week). By the following Wednesday, you must post a response to the review of your original post, addressing any questions or concerns from your reviewer. Each post will be graded as “good” (3), “satisfactory” (2), “poor” (1), or “insufficient” (0) by the professor/TA. POSTS, REVIEWS, AND RESPONSES MUST BE ON LAULIMA BY THEIR RESPECTIVE DEADLINES, OR THEY WILL NOT COUNT TOWARDS YOUR GRADE. If your reviewee does not post by Wednesday, choose another poster to review. Similarly, if your reviewer does not post a review by Friday, evaluate your own posting and revise it as well as you can.

Projects: The course is oriented around term projects, which will be carried out by teams of 3-4 students each. Students will take a mobile site or service from concept through design, implementation, evaluation and deployment. Teams will present their design and implementation to the class via short presentations. See the breakdown in Section 3, below.

3. Evaluation and grades

The evaluation will be broken down as follows:

- Postings (35%): 2.5% (1% for the original post and 1% for the review, and 0.5% for the response to the review) per week x 14 weeks (2 forgiven) = 35%
- Project (65%). Each team project part will be evaluated based on the written work and the video presentation.
 - i. Project proposal/design (15%): Teams will submit a description (~5 pages) of the proposed project and will also give a short (~5min) video or live presentation.
 - ii. Project design/implementation (15%): A partial or full (depending on the scale of the proposal) implementation of the project described in the proposal. Teams will submit documentation (~5 pages) of the implementation and will present the implementation to the class in a short (~5min) video or live presentation.
 - iii. Project evaluation (15%): An evaluation of the implemented project, using real users and sound evaluation techniques. (10% on own evaluation / 5% evaluation of other team, for a total of ~5 pages). Teams will present the evaluation to the class in a short (~5min) video or live presentation.
 - iv. Final project submission (20%): Teams will resubmit stages I-III as described above, incorporating feedback from the professor and from other students, and will present their full project in a short (~5min) video or live presentation.

Students must adequately complete all writing and oral assignments to pass the course with a D grade or better. Students who do not complete all writing and oral assignments will get a D- or an F and will not earn W or O Focus credit.

Late project documents/videos lose 10%/day, starting at 11:55pm on due date. Documents/videos over 5 days late will be graded out of 50%. All documents/videos must be handed in by May 6. Weekly Lulima postings will not be graded if posted after the due date.

For all evaluated work, students may hand in a draft *at least* one week before the due date, for detailed feedback.

90-100%	A
80-89%	B
70-79%	C
60-69%	D
< 60%	F

4. Reading and other materials

There is no required textbook; however, weekly readings and reference materials will be provided to support the material covered in class.

Other materials include the various software development kits and emulators offered (for free) by hardware manufacturers.

5. Special Needs

If you need reasonable accommodations because of the impact of a disability, please:

1. Contact the Kokua Program by telephone (V/T) at 956-7511 or 956-7612 or in person at the Queen Liliuokalani Center for Student Services building, room 013;
2. Speak with me privately to discuss your specific needs. I will be happy to work with you and the KOKUA Program to meet your access needs related to your documented disability.

Information about the Kokua Program is available online at:
<http://www.hawaii.edu/kokua/>.

6. Academic honesty

An occurrence of academic dishonesty will result in a grade of 0 for the assignment or exam and a memo in your ICS department file describing the incident. Should there already be a memo of this type in your file, you will receive an F for the course, and the incident will be referred to the Dean of Students.

Please note the UH policy on academic dishonesty:

<http://www.hawaii.edu/student/conduct/discipline.html>
<http://www.hawaii.edu/student/conduct/imper.html>

Please note that this syllabus is subject to change. The latest version can be found on Laulima.