

Syllabus for ICS 466: Design for Mobile Devices

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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:

- Different perspectives regarding other nations
- Increased capacity to analyze issues with appreciation for disparate viewpoints
- 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 *design* a mobile app and communicate about it effectively.

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). 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.

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. Schedule

Week	Topic/Due
1	Design principles
2	Technical considerations
3	Project Part I document and presentation
4	Mobile standards and practices
5	Choosing a platform
6	Project Part II document and presentation
7	Evaluating an app
8	International and cultural differences
9	Project Part III document and presentation
10	Cybersecurity
11	Future of mobile devices
12	Final project document and presentation

4. Evaluation and grades

The evaluation will be broken down as follows:

- Postings (35%): 3.5% (2% for the original post and 1.5% for the review) per week x 10 weeks = 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 Laulima 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.

97-100%	A+
94-96%	A
90-93%	A-
87-89%	B+
84-86%	B
80-83%	B-
77-79%	C+
74-76%	C
70-73%	C-
67-69%	D+
64-66%	D
60-63%	D-
< 60%	F

5. Reading and other materials

There is no required textbook. 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.

6. Special Needs

If you need reasonable accommodation 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/>.

7. Academic honesty

Plagiarism and cheating are not tolerated in this course. If a student is caught cheating or plagiarizing, s/he will fail the course, and further disciplinary action may be taken. Please be sure to review the definition of plagiarism, and guidelines on how to avoid it, here:

http://www.cte.hawaii.edu/plagiarism/plagiarism_1.html

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