Syllabus for CSE162: Mobile Computing

Spring 2021
Instructor: Hua Huang

Designation:	CSE162 Mobile Computing
Catalog Description:	Introduction to the basic concepts of mobile cloud computing, including: 1. Different types of mobile computing devices. 2. The communication technologies used in modern smart phones; 3. The context-aware computing technologies on mobile devices and their applications; 4. Programming on mobile devices, such as smart phones and tablets.
Text Books and Other Required Materials:	Optional: Raj Kamal: Mobile Computing, third edition; Oxford University Press, 2019; ISBN: 9780199455416 Optional: Stefan Poslad: Ubiquitous Computing: Smart Devices, Environments and Interactions; Wiley online library, 2009; Online ISBN:9780470779446 (Available from the University library)_
Course Objectives/ Student Learning Outcomes:	1. Learning of the fundamental principles of mobile computing, the major technologies that support mobile computing, and a basic understanding of the role of mobile computing in the context of the everyday living. 2. Gaining experience in implementing applications on the mobile device platforms. 3. Gaining skills in solving technical challenges by working on labs.
Program Learning Outcomes:	1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions; 2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline; 5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline; 6. Apply computer science theory and software development fundamentals to produce computing-based solutions;
Prerequisites by Topic:	CSE 031: Introduction to Computer Science and Engineering II; MATH 024: Linear Algebra and Differential Equations; CSE100: Algorithm Design and Analysis; CSE165: Introduction to Object Oriented Programming;
Course Policies:	If you will be missing class lectures or labs due to participation in sports or academic club activities (e.g., debate), you should confirm with the instructor before each missing date, and provide documentation within four weeks of such dates or before the end of semester, whichever comes first. This is particularly important in the case of tests and program deadlines; make-up tests and extension of deadlines will NOT be provided unless arrangements are made beforehand. Deadline and late Policies: Late Policy: unless otherwise indicated, assignments and projects are due by the beginning of lecture on their due date. If you hand in an assignment late, we will take off 10% for each day (or portion thereof) it is late. We will not consider granting Incompletes as grades.
Academic Dishonesty Statement:	a. Each student in this course is expected to abide by the University of California, Merced's Academic Honesty Policy. Any work submitted by a student in this course for academic credit will be the student's own work. b. You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give "consulting" help to or receive "consulting" help from such students. However, this permissible cooperation should never involve one student having possession of a

	copy of all or part of work done by someone else, in the form of an e mail, an e mail attachment file, a diskette, or a hard copy. Should copying occur, both the student who copied work from another student and the student who gave material to be copied will both automatically receive a zero for the assignment. Penalty for violation of this Policy can also be extended to include failure of the course and University disciplinary action. c. During examinations, you must do your own work. Talking or discussion is not permitted during the examinations, nor may you compare papers, copy from others, or collaborate in any way. Any collaborative behavior during the examinations will result in failure of the exam, and may lead to failure of the course and University disciplinary action.
Disability Statement:	Accommodations for Students with Disabilities: The University of California Merced is committed to ensuring equal academic opportunities and inclusion for students with disabilities based on the principles of independent living, accessible universal design and diversity. I am available to discuss appropriate academic accommodations that may be required for student with disabilities. Requests for academic accommodations are to be made during the first three weeks of the semester, except for unusual circumstances. Students are encouraged to register with Disability Services Center to verify their eligibility for appropriate accommodations.
Topics:	-Mobile Applications and Requirements -Mobile application development concepts -Mobile and ubiquitous sensing, tagging and controlling -Location based services -Context aware systems -Mobile and Ubiquitous networks
Class/laboratory Schedule:	Lectures: TR 9:00-10:15AM; Lab 1: 1:30-4:20PM; Lab 2: 4:30-7:20PM
Midterm/Final Exam Schedule:	Midterm Exam: TBD Final Exam: May 11 11:30AM-2:30PM
Course Calendar:	
Professional Component:	
Assessment/Grading Policy:	Labs: 35% Exercises: 15% Exams: 45% Participation: 5%
Coordinator:	Hua Huang
Contact Information:	Hua Huang: hhuang80@ucmerced.edu Hsin-Ping Huang: hhuang79@ucmerced.edu
Office Hours:	Hua Huang: Thursday 1-2pm Hsin-Ping Huang: Friday 10-11am