Georgia State University Computer Science Department

CSC 4360: Mobile App Development
-- Spring, 2018 -5:30pm - 7:15pm, Monday & Wednesday: Langdale Hall, Room #425

Course Syllabus

Instructor:	Dr. Durham	edurham@cs.gsu.edu
	course site: D2L	
Office:	TBD	
Office hours:	Immediately after class, and by appointment. (the best way to reach me is by email) Please include "CSC 4360 – Mobile App Dev" in the subject of ALL emails. DO NOT USE D2L INTERNAL MAIL	

Required materials:

Textbook: Mobile App Development for iOS and Android, Edition 2.0

Jakob Iversen & Michael Eierman Published by Prospect Press, 2017

ISBN-10: 1943153280 ISBN-13: 978-1943153282

eTextbook option

ISBN-13: 978-1943153275 ISBN-10: 1943153272

Online version: https://www.vitalsource.com/referral?term=9781943153275

Github source: http://github.com/LearningMobile/BookApps2.0

Online Resources will be posted on iCollege/D2L

Course Description:

Credit hours: 4

Description: This course will cover the technologies, tools, frameworks and languages that are most commonly used in developing mobile applications for multiple mobile platforms, including (but not limited to) iOS, Android and Cross-platform Mobile development. Topics include mobile application design, user interfaces, mobile application demographic and platform delivery, mobile networking, hosting infrastructure, and mobile security. Students will investigate alternate frameworks for app development, including technologies for rapid development of applications. Students will also learn the fundamental principles on which these topics are based, so that they will be prepared for the new technologies that are constantly being developed.

This course will delve into the practicalities of mobile application development. Programming topics will cover the basics of different mobile architectures, security and performance considerations, and mobile programming technologies. Emphasis is placed on structure and clarity as well as correctness. The course includes a team project in which students are given hands-on experience to analyze a business problem and design a native mobile-application software solution.

The major method of instruction will be lecture/discussion and hands-on projects/labs. Student interaction is expected and encouraged. Students will be graded based on their performance in a series of tests, and both

individual assignments/labs and team projects. Students will design, develop and implement programs. Tests will cover material from both the textbook and projects/assignments/labs. All tests are non-cumulative, and may be given outside of class time (take-home test) at the discretion of the instructor. Pop quizzes may be given for variable credit through-out the course, during class time. Pop quizzes may not be made-up, even with an excused absence; therefore attendance to each and every class session is strongly encouraged.

We will use iCollege/D2L to post class materials, submit assignments and to communicate notifications to students in cases of sudden changes to class requirements, instructor office hours/availability, and assignment deadlines. It is the student's responsibility to keep up with all posted class materials. Please check the class website for updates often.

REMEMBER this is a computer science course. All students are required to participate in activities associated with programming, i.e. the design and development of software. The class and team activities emphasize the building blocks of programming, together with the key elements of the software development: requirements and specifications, design and implementation, and validation and testing. Details will be discussed in class.

Course outcomes: The goal for students in this course is to learn about mobile application development. After successful completion of this class, students will be able to:

- Understand the programming techniques required to develop Hybrid and Native Mobile applications.
- Understand the basics of different mobile architectures, including security and performance considerations.
- Design and implement standard mobile application programming scenarios, using typical application development tools.
- Understand project roles, and work in a team for the development of a mobile application.

Academic conduct: Collaboration with your classmates in studying and understanding the material is strongly encouraged. Copying another's work will be considered cheating; all students involved will receive a grade of zero, a reduction in the course grade, and possibly other penalties including failure of the course and dismissal from the University. Collaboration or cheating on examinations will result in a grade of zero, a reduction in the course grade, and possibly other penalties including failure of the course and dismissal from the University. Plagiarism, fabrication, or other academic dishonesty or misconduct will result in a grade of zero, a reduction in the course grade, and possibly other penalties, including failure of the course and dismissal from the University. Unsatisfactory grades earned because of academic misconduct cannot be removed from your grade point average by repeating the course and students cannot do extra credit work to make up for misconduct.

Assignments: Assignments will be posted on the class web page (iCollege/D2L) about a week before they are due. Assignments are due <u>ON</u> or <u>BEFORE</u> the due date.

• Assignments and Projects: Project and programming assignments will be due throughout the term. Each of these assignments is weighted individually. You may turn assignments in early. Assignments will be submitted to the course site (iCollege/D2L) or turned in during class, depending on the assignment requirements. Late assignments are due BEFORE the following class-time (i.e. if an assignment is due Monday, and you do not complete it by the deadline, then you have until BEFORE the next class BEGINS on Wednesday to turn it in).

<u>Late assignments will be graded at 10% discount if submitted before the next class meeting,</u> beyond which they will not be accepted.

- Students will be given specific guidance on the amount of collaboration permitted for each assignment. Unless otherwise specified, all assignments are individual assignments.
- Makeup examinations will not be given unless you make prior arrangements with the instructor.

• **Guidelines for submitting work:** All assignments will either be submitted to the course site (iCollege/D2L) or turned in during class, depending on the assignment requirements. <u>All submissions must be received prior to the stated deadline.</u> Assignments must be typed or computer printed. Handwritten material is not acceptable.

In the upper right corner of the each page you turn in, put the following information in the order shown:

For individual student submittals, please include:

Your Name

CSC 6360 - Durham (be sure to put instructor name here)

The date of the class when the item is turned in (due date)

Identification of the item (Assignment #)

For submitted team work, please include:

Your Team Number

Each Student Name in the team

CSC 6360 - Durham (be sure to put <u>instructor</u> name here)

The date of the class when the item is turned in (due date)

Identification of the item (Assignment #)

- If the work you are turning in has more than one page, staple the pages together in the upper left corner.
- If a project is designated a "group" assignment or project, then students will work in assigned groups on the assignment and turn in <u>one submission</u> that is the collaborative effort of the group.

Exams: Test content will come from the text and other material presented in lecture sessions as well as assignments. Note that material presented in class will supplement the assigned reading. Therefore, class attendance and good note-taking are essential tactics for success. No electronic copies of textbooks, etc., will be allowed for use during an examination – not even during an "open-book" examination.

All examinations can have multiple choice, short-answer and true-false questions. Tests will cover material from lectures as well as from both the textbook and projects/assignments. All tests are non-cumulative, and may be given outside of class time (take-home test) at the discretion of the instructor.

A grade of <u>zero</u> will be assigned for all exams missed for which a student does not have an excused absence. It is the student's responsibility to arrange for an excused absence **before** the exam. If an exam must be missed due to unforeseeable circumstances that would result in an excused absence, then a make-up examination may be allowed at the discretion of the instructor.

Grading plan:

Projects / Group Assignments	25%
Exams	20%
Labs / Homework Assignments	40%
Attendance/Pop Quizzes	15%
	100%
Extra Credit**	5%

Grading scale:

A: 90 and above B: 80-89.9 C: 70-79.9 D: 60-69.9 F: Below 60

Class attendance policy: The Instructor expects your attendance at each and every class; however, actual attendance is up to the student. Grade performance is a demonstrated function of attendance, preparation and

participation. You can get behind very easily by skipping classes, resulting in missed pop quizzes which cannot be made-up and a poor understanding of the material, which will show up as a poor grade for the class. Any class sessions missed by the student are the student's responsibility to make up and obtain notes for, not the instructor's. Students are responsible for all announcements and assignments made in the class lecture. If you miss part or the entire class lecture, call or email another student. Do not call/email me to repeat the lecture. Further, if you know that you will be absent for an extended period of time during the semester, you MUST notify me for discussion of consequences. Late arrival that causes disruption, early departure that causes disruption, excessive conversation among students (a disruption in its own right), use of electronic devices that cause disruptions and other actions that disrupt the classroom are unacceptable. ALL ELECTRONIC DEVICES MUST BE SILENCED OR TURNED OFF. NO EXCEPTIONS.

Students with disabilities: Students with disabilities who believe that they may need accommodations in this class are encouraged to contact the Office of Disability Services at (404) 413-1560 as soon as possible to better ensure that such accommodations are implemented in a timely fashion.

Withdrawal Policy: The last day to withdraw with a W will be announced. Ceasing to attend class or oral notice thereof <u>DOES NOT</u> constitute official withdrawal from the course. Students who simply stop attending classes without officially withdrawing usually are assigned failing grades. Students wish to withdraw after the scheduled change period (add/drop) must obtain and complete a withdrawal form from the Academic Services Department in the Registrar's Office.

Enrollment Policy: Only those students who are enrolled in the class may attend lectures, receive assignments, take quizzes and exams, and receive a grade in the class. If a student is administratively withdrawn from this course, they will not be permitted to attend class nor will they receive any grade for the class.

Electronic Devices: In order to minimize the level of distraction, all watches, tablets, laptops, and cellular phones must be on quiet mode during class meeting times, unless otherwise indicated by the instructor. ALL CELL PHONES MUST BE SILENCED OR TURNED OFF. NO EXCEPTIONS.

Email Messages: If you have a question or concern, you are welcome to email me. Remember to put "CSC 4360 – Mobile App Dev" in the subject field of every e-mail message that you send to me. **E-mail messages** that are missing this information are likely to be moved to a folder the instructor will seldom check.

Modifications to this syllabus: This document is an initial syllabus. The syllabus is a living document, and may change (in whole or in part) based on the needs of this class, at the discretion of the instructor. Any changes will be posted on the class iCollege/D2L site, as part of the class materials. It is the student's responsibility to keep up with all posted class materials. Please check the class website for updates often.

**Extra Credit: There will be at least 5% extra credit available in this class. Extra credit is IN ADDITION TO the full credit for the course. Extra credit eligibility will be determined based on student class participation and attendance. In other words, students who request extra credit opportunities must attend all lectures and complete all class assignments ON TIME. Extra credit is only available to students who have demonstrated that they are putting in 100% of the required effort.