CSCI 497/597 Programming Mobile Devices

INSTRUCTOR

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Office Hours: Mon 12pm-4pm, Tue 10am-11am, Tue 1pm-3pm, Thu 10am-11am, Thu 1pm-3pm, other times by appointment only

CLASS MEETINGS

M 10:00p-12:40p in Jour204

PREREQUISITES

CSCI 270 or Consult with instructor

DESCRIPTION

An elective course for Computer Science graduate and undergraduate students. This course covers the development of applications for network enabled mobile devices. Topics include memory management, custom user interface development, event handling, animation using 2-D/3 D graphics, audio and video application programming interfaces, and data storage. Object Oriented Programming will be introduced with the Objective –C.

TEXTBOOK

iPhone Programming - An App Driven Approach, Deitel & Deitel, ISBN: 013705842X.

REFERENCES

More iPhone 3 Development: Tackling iPhone SDK 3 (Beginning) , Dave Mark, Jeff LaMarche ISBN: 978-1430225058

Head First iPhone Development: A Learner's Guide to Creating Objective-C Applications for the iPhone by Dan Pilone, Tracey Pilone 978-0596803544

Beginning iPhone 4 Development: Exploring the ios SDK, David Mark, Apress 978-1-4302-3024-3

Student Learning Outcomes

The purpose of this course is to introduce students to the iPhone application program development. Students should be able to perform the following upon completion of this course:

- Develop a wide range of completely functional mobile applications (8 - 10 apps).
- Test the mobile application using the vendor supplied simulator
- Test the mobile application on the actual device (ipod, iphone, ipad)
- Successfully submit app to vendor's app store (depends user's license)

COURSE OUTLINE

The following topics should be covered in this course:

- Application Lifecycle (i.e., Pause, Resume, and Stop Applications)
- User Interface Components (e.g., TextFields, Buttons, etc)
- Event Handling (Touch screens)

- 2D/3D Graphics and Animations
- Data Persistence (Files and Databases)
- Scrollable Regions and Tables
- Streaming Video and Audio
- Web Services
- SplitView Apps for Ipad

EVALUATION
Your grade for the course will be based on the following percentages:

Labs / Assignments	50%
Final Project	30%
Tests	15%
Class Activity	5%

Final test might be in any form, a program, such as project presentation, a regular test, or a paper. The instructor will make a decision after a cooperative discussion with the students.

You should do your own work on exams/projects and for computer assignments. Copying another student's work is not acceptable. Any indication of cheating and/or plagiarism on an exam/assignment/project will be an automatic 0 (zero) for the exam/assignment/project for all students involved. Yet, based on cheating and plagiarism activity in any section of class, instructor holds the right to give F grade to the identified student(s). Regarding codes in assignments / projects, you may be required to explain the code you submitted. In case of discursive explanation, the instructor holds the right to lower your grade. You are given many programming assignments during semester.

Letter grades will be assigned according to the following scale:

A - at least 90% of the total points
B - at least 80% of the total points
C - at least 70% of the total points
D - at least 60% of the total points
F - less than 60% of the total points

STUDENTS WITH DISABILITIES
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library, Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu

ACADEMIC ETHICS:
"All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (See Student's Guide Handbook, Policies and Procedures, Conduct). Absolutely no usage of laptops and cellular devices (texting and talking) in class. Talking and other activities that distract/disturb others in the class would not be tolerated. Instructor holds the right to ask

you leave the classroom any time based on any of disturbing attitude. Each student should sign the sign-sheet if asked by instructor. Late student may not be allowed to participate the lecture.

ATTENDANCE POLICY:

Attendance is mandatory. Students are expected to be present at all class lectures and are responsible for all material covered in class and assigned in readings.

COURSE REQUIREMENTS and DEADLINES:

Credit will be given for ONLY those exams, programs, and/or projects turned in no later than the deadline as announced by the instructor of this class, unless prior arrangement has been made with the instructor. Late programs/ projects/assignments can or cannot gain partial credit. Credit for late programs/projects/assignments will be announced with the description of it.

Assignments and projects will be posted in university's eCollege communication system. Detailed information will be provided by the instructor. Students also should turn in their assignment through eCollege portal. Each student is responsible for the content/instructions of email communications.

Tentative Schedule and Topics

Week	Lecture Topic
1	Intro to Interface Builder (IB) Objective C Data types, Intro to Objective C Classes IBOutlets
2	Setters/Getters Arrays and Collections
3	UIControlEvents/UIEvents and Event Handlers Application Lifecycle/UILabel
4	UITextViews/UITextFields Memory Management/Properties
5	(Programmatically implementing interfaces) UIScrollable Views and Dynamic Interfaces
6	Intro to File Processing/Twitter Integration
7	Intro to UIView and Multi-Touch Events Intro to CoreGraphics
8	CoreGraphics continued/Sounds (AVAudioPlayer)
9	WebView/MapView
10	MapView Contd/SQLite
11	TableView/File Processing II
12	TabViewController/VideoPlayer
13	Core Data
14	SplitView applicatioin for Ipad