BUS 496: Electronic Commerce (Android Application Development)

Spring 2014

Orfalea College of Business
California Polytechnic State University

Instructor:	Gregg M. Erickson
Office:	03 - 434
Office Hours:	Monday 4:00 pm to 5:00 pm, Thursday 9 am to 12 noon
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Course Description:

This course will introduce you to the basics of Android Application Development. Our primary focus is on mobile applications in a business environment. We will the Java language, Eclipse, ADT 20130219, and our previous knowledge of the basic constructs of computer programming, programming logic to develop novel business applications.

Course Objectives:

The course will incorporate up-to-date application development tools and technologies currently used by business enterprises. Upon the completion of this course, you will be able to:

- Use the basic programming tools available in Eclipse
- Design and implement basic input and output interfaces in Java
- Develop applications that can operate on a wide variety of Android devices
- Develop applications that use data from popular device components such as GPS, Camera, etc...
- Successfully deploy applications to Google Play

Required Text:

We will use the following :

"Android Programming: The Big Nerd Ranch Guide", Phillips & Hardy - ISBN 978-0321804334 **(BNR)**

"Introduction to Programming Using Java", Version 6.0, June 2011, David J. Eck
(free electronic PDF download!) **(ECK)**

Handouts or PDF will be provided for selected items.

Grading:

Grades will be determined based upon performance on the homework, assignments, in-class participation, and quizzes. The weights are assigned as follows:

First quiz:	22%
Second quiz:	22%
Group assignments:	15%
Final Group Project:	26%
Homework:	10%
Class attendance/participation:	5%

Quizzes: There will be two quizzes which will test class-content understanding. These will not necessarily be cumulative but, due to the cumulative nature of computer science, certain fundamental constructs will reoccur.

Group assignments: There will be two or three hands-on assignment where groups of **Three** students develop computer applications related to course materials. You will be able to form your own group.

Final Group Project: You may propose your own project to be approved.

Homework: Homework will be assigned approximately once a week and will be due the following week. The homework assigned on a Tuesday is due on the following Tuesday before class, and the homework assigned on a Thursday is due on the following Thursday before class. Homework is to be completed individually. This is **NOT** a group assignment—each student is to work and hand in his/her own homework. Late homework will receive 10% penalty. Any homework turned in more than one day late will not receive any credit.

In-class exercises: In most class meetings, students will work in **small groups** on assignments related to the materials discussed on that day.

Class attendance: Students are expected to arrive on time and attend every class except for emergency. If a class is missed, it is the student's responsibility to obtain class notes, handouts, etc. Students are also expected to work on in-class exercises. Any use of emails, instant messengers, Internet, or materials not related to class work will result in a penalty reflected in your class participation grade.

Note: **Do your own work**. As a student at Cal Poly, you have an obligation to abide by the university's honor code and the student computing policy. Any violation of this code will immediately be sent to the judicial board. Any plagiarism or cheating will result in an automatic failure (i.e., you will receive an "F" grade for the course).

Tentative Class Schedule (Subject to change)

Date	Week	Topics	Readings
31-Mar	1	**No Class - Cesar Chavez's Birthday**	
2-Apr		Hello World With Java, From C# to Java	(ECK) Chapt. 1 & Chapt. 2
7-Apr	2	Methods / Using Eclipse	(ECK) Chapt. 3, Read 4.1 - 4.3.1, 4.4 - 4.4.2
9-Apr		Basics of OOP (Classes, Objects)	(ECK) Chapt. 5.1-5.4.3
14-Apr	3	More on OOP (Classes, Inheritance, etc..)	(ECK) Chapt. 5.5, 5.7
16-Apr		Intro to ADT and Android Hello World	(BNR) Chapts. 1 & 2
21-Apr	4	Activity Lifecycle - Debugging	(BNR) Chapts. 3, 4
23-Apr		More on Activities	(BNR) Chapts. 5, 6
28-Apr	5	UI Fragements, Layouts	(BNR) Chapts. 7, 8
30-Apr		Widgets, Lists, ViewPagers and Dialogs	(BNR) Chapt. 9, 10, 11 & 12
5-May	6	**Quiz 1**	
7-May		Files and IO in Android	TBA (Polylearn)
12-May	7	Graphics	TBA (Polylearn)
14-May		Graphics II	TBA (Polylearn)
19-May	8	AV and Media Playback	(BNR) Chapts. 13, 14, 15
21-May		GPS	(BNR) Chapts. 33
26-May	9	No Class - Memorial Day - Class on 27th	
27-May		SQLite	(BNR) Chapts. 34
28-May		SQLite II	TBA (Polylearn)
2-Jun	10	Maps and Loaders	(BNR) Chapts. 35 & 36
4-Jun		**Quiz 2**	
9-Jun	11	**Final Project Due at Noon**	
11-Jun			