Point Loma Nazarene University CSC 412: Special Topics in Computer Science – Android Programming (2 units) Fall 2017

Instructor:

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Office hours: MWF 8:30-9:30, 10:30-12:00	TTh 8:30-9:30, 1:30-2:00
Course Time and Location:	MW 1:30-2:25 RS 13

Text:

Phillips, Stewart, Marsicano. Android Programming: The Big Nerd Ranch Guide 3rd Edition. 2017. We will cover chapters 1-14 in this class.

Course Catalog Description:

Study of an area of computer science not otherwise included in the curriculum. Topics are determined by the needs and interest of the students and faculty involved. May be repeated up to a total of six units

This semester the topic covered will be Android Programming including interface design, app lifecycle, different views and managers, fragments, toolbars, database interaction. Students will write simple apps from scratch and alter more advanced applications.

Course learning outcomes:

- Students will be able to write correct and robust software for the Android platform.
- Students will understand the application lifecycle
- Students will be able to explain when a mobile app is the appropriate platform

Course Organization:

Lectures: Cover the highlights of chapters assigned – **not** a substitute for reading. The lecture slides can be obtained from Canvas

Labs:

Labs will be based on the book chapters. Students will first follow the tutorial in the chapter assigned, completing the project as specified, and understanding the concepts presented in the project. Students will generally then be asked to either make a new project from scratch, or demonstrate their understanding of the concepts by making changes to the completed project. You may work on labs in groups of no more than 2 people. If you complete a lab as a team, please turn in only 1 lab sheet and code copy with both names on the assignment. The privilege of working together on labs may be revoked at any time if it appears that it is not helping you learn the material as indicated by exams and quizzes. **If you are working together, please do acknowledge this because programs that are otherwise too similar will either split the points, or be given a grade of zero.**

Labs must be demonstrated either to me (8:30-9:30 AM any weekday) or to the lab assistant Alex Mathews in the virus lab, signed off, and turned in at the beginning of class on the day they are due (usually Monday) with a hard copy of your code. **If you got help from some online source, please give credit to that source in your code.** No late labs are accepted but you can get partial credit for an incomplete lab turned in on time. **Quizzes:** On the day that the lab is turned in, you will generally have a quiz over the material learned for the lab. It will most likely be a vocabulary quiz with a few general questions on the challenges added if applicable. Quizzes cannot be made up, but the lowest 2 quizzes for the semester will be dropped.

Midterms: There will be 2 midterm exams. These exams will cover vocabulary since the last exam as well as questions about the code that you have written in your labs since the last exam. If you must miss an exam for a school event, you must make arrangements to take the exam ahead of time. Missing an exam for other reasons, short of an officially documented emergency, will most likely result in a grade of 0. The midterms are currently scheduled for **October 4 and November 8**.

Final Exam: The final exam will be cumulative and cover vocabulary, concepts of Android programming, and will demonstrate the understanding of Android code. **The final exam will be Monday of finals week at 1:30.**

The final exam date and time is set by the university at the beginning of the semester and may not be changed by the instructor. This schedule can be found on the university website and in the course calendar. No requests for early examinations will be approved. Only in the case that a student is required to take three exams during the same day of finals week, is an instructor authorized to consider changing the exam date and time for that particular student.

Grading:

Quizzes	20%
Labs	35%
Midterms	25%
Final Exam	20 %

Final grades will be determined as follows:

0					
100-93%	А	80-82.9%	B-	67-69.9%	D+
90-92.9%	A-	77-79.9%	C+	63-66.9%	D
87-89.9%	B+	73-76.9%	С	60-62.9%	D-
83-86.9%	В	70-72.9%	C-	0-59.9%	F

University Mission:

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service becomes an expression of faith. Being of Wesleyan heritage, we aspire to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

Department Mission:

The Mathematical, Information, and Computer Sciences department at Point Loma Nazarene University is committed to maintaining a curriculum that provides its students with the tools to be productive, the passion to continue learning, and Christian perspectives to provide a basis for making sound value judgments.

Attendance:

Attendance is expected at each class session. In the event of an absence you are responsible for the material covered in class and the assignments given that day.

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. See

http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Class Attendance in the Undergraduate Academic Catalog.

Class Enrollment:

It is the student's responsibility to maintain his/her class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), the student has the responsibility to follow through (provided the drop date meets the stated calendar deadline established by the university), not the instructor. Simply ceasing to attend this course or failing to follow through to arrange for a change of registration (drop/add) may easily result in a grade of F on the official transcript.

Academic Accommodations:

If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) within the first two weeks of class to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at <u>DRC@pointloma.edu</u>. See <u>Disability Resource Center</u> for additional information. For more details see the PLNU catalog: http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Academic_Accommodations

Students with learning disabilities who may need accommodations should discuss options with the instructor during the <u>first two weeks</u> of class.

Academic Honesty

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic <u>dishonesty</u> is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Academic_Honesty for definitions of kinds of academic dishonesty and for further policy information.

Copyright Protected Materials:

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

Credit Hour:

In the interest of providing sufficient time to accomplish the stated course learning outcomes, this class meets the PLNU credit hour policy for a 4 unit class delivered over 15 weeks. Specific details about how the class meets the credit hour requirements can be provided upon request.

Monday	Tuesday	Wednesday	Thursday	Friday
Syllabus, review Java with listeners	Aug 29	30	31	1
Download Android	←	Overview of dev cycle, XML,		
		chapter 1 – challenge 1		
Sept 4	5	6	7	8
Labor day		Quiz on Chapter 1		
		Chapter 2, Challenges 1&2		
11	12	13	14	15
Quiz on Chapter 2		Work on chapter 3 (challenges		
Intro to lifecycle, Chapters 3-4		1&2) and chapter 4 (no		
		challenges)		
18	19	20	21	22
Quiz on chapters 3,4		Continue to work on chapter 5		
Chapter 5: all challenges				
25	26	27	28	29

Expected Schedule CSC 412

Quiz chapter 5 Chapter 6 - challenges 1 & 2		Continue to work on chapter 6 along with Address app		
0-+2	2	assignment	5	(
Oct 2 Ouiz on chanter 6, continue to work	3	4 Even 1	5	6
Quiz on chapter o, continue to work				
on Address app	10	11	12	12
9	10		12	13
Chapters 7-8 (no challenges)		Continue with chapters / &8		
16	17	18	19	20
Quiz on chapters 7&8		Chapter 10 challenge from Dr.		Fall
Chapter 9,10		Carter		Break
23	24	25	26	27
Quiz on chapters 9 & 10		Challenges 1 & 2 from chapter		
Chapter 11		11		
30	31	Nov. 1	2	3
Quiz on chapter 11		Timepicker challenge from Dr.		
Chapter 12		Carter		
6	7	8	9	10
Quiz on chapter 12		Exam 2		
Continue to work on timepicker				
challenge				
13	14	15	16	17
Chapter 13		Work on challenge from Dr.		
		Carter		
20	21	22	23	24
Chapter 13 quiz		Thanksgiving	Thanks-	Thanks-
Introduction to Access/SQLite			giving	giving
27	28	29	30	Dec 1
Chapter 14, SQLite		Chapter 14		
4	5	6	7	8
Continue to work on chapter 14		Quiz on chapter 14		
-		Review		
11	12	13	14	15
Final 1:30				