

CS-403: Mobile Application Development (Fall 2015)

### Communication and Contact Information

Instructor: Prof. George Corser (www.georgecorser.com)

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Office Hours: 10:30 am – 12:30 pm MW, or by appointment, Room SE-179

Class Hours: 2:30 pm – 4:20 pm MW, Room SE-145

Course-related communication must be in Canvas, accessible at <a href="mailto:svsu.instructure.com">svsu.instructure.com</a>, using Inbox shown below. Make certain you have the correct Notification settings.

### **Course Description**

"This course examines mobile application development for small footprint devices. Development strategies, issues and limitations pertaining to mobile devices will be presented. Current techniques, toolsets and application frameworks will be provided with students producing several mobile applications." (Source: SVSU Course Catalog)

# Textbook (Optional)

Android How to Program, Second (2nd) edition, by Deitel, Deitel and Deitel (see also: textbook website)

### Course Goals

By the time you finish this course you will have a basic understanding of Android app development. Concepts will be presented as they become necessary to build apps. The rough schedule of topics is as follows. However, this is tentative. If students develop their own extra credit presentations, these may replace the previously scheduled material.

Week	Topic
1	Introduction to Android, Android Studio and App Inventor
2	Android Market and App Business Issues
3	Simple Game App: Flappy Birds, in App Inventor
4	Utility App: Tip Calculator, in Android Studio
5	More Advanced Game App: Cannon Game, in Android Studio
6	Data Driven App: Address Book, in Android Studio
7	GPS App: Route Tracker, in Android Studio
8	Event Manager, in Android Studio
9	Other platforms
10	App Security
11	Conclusion

# **Technology Components**

We will use Android Studio, not Eclipse. All communication will be through Canvas, accessible at <a href="mailto:svsu.instructure.com">svsu.instructure.com</a>. All code will be put on github at <a href="www.github.com/cs403">www.github.com/cs403</a>.

### Assignments and Exams

Four programming assignments constitute 60 percent of the course points. That's 15 points per program.

There are two exams in the course, a midterm and a final exam, each worth 20 points. Exams are administered on Canvas. They are open book, open note, open internet... but not open discussion.

#### Extra Credit

Extra credit is available under the following conditions.

- Video. IF you create a video using my echo360 account presenting a concept in theoretical computer science, AND IF this
  concept was approved by me by email (not spoken word), AND IF you present this video in class in this semester, or record
  the video as you present the concept in class in this semester, AND IF the quality of the video meets with my approval, THEN
  AND ONLY THEN you get 3 points extra credit.
- 2. <u>Lab instructions</u>. IF you also prepare step-by-step written instructions for students to solve a problem in the conceptual area of computer science for which you made the video, AND IF the quality of the instructions meets with my approval, THEN AND ONLY THEN you get an additional 3 points extra credit.
- 3. <u>Quiz questions</u>. IF you also prepare four (4) multiple choice quiz questions, each with five (5) options¹ that are not easily google-able, AND IF these quiz questions are useable as quiz questions in Canvas, AND IF the quality of the questions meets with my approval, THEN AND ONLY THEN you get an additional 4 points extra credit, one point per question.
- 4. <u>Doubling effect</u>. If one of the above is substandard, you may still get partial credit, but certainly not any doubling effect. However, IF you complete all three of the above steps to my satisfaction, your extra credit points will be doubled. That is, instead of getting 10 points, you get 20 points of extra credit.

# **Grading Scale**

Based on the total points scored for the course, grades will be awarded according to the following schedule.

<b>Total Score</b>	Grade
93 or above	А
90 to 93	A-
87 to 90	B+
83 to 87	В
80 to 83	B-

Total Score	Grade
75 to 80	C+
70 to 75	С
60 to 70	D
Below 60	F

<sup>&</sup>lt;sup>1</sup> Multiple choice quiz question options cannot be "none of the above" or "a and b only" or in any way reference the other options because if they are used in a computer grading system that scrambles the order of the options the references may no longer reflect the correct answer.

# Class policies

<u>Attendance</u>. Homework is peer-graded in class, at the beginning of class, so if you are late or absent, then your homework will not be graded.

Make-up assignments. None.

# Academic Integrity

Cheating means submitting someone else's work and claiming it was your own. Cheating also includes giving work for someone else to use in such a way. Unless otherwise stated explicitly in an assignment, students must do their work independently. University and departmental policies on academic dishonesty apply. Publicly-available sources for code or other material may be freely used if appropriately attributed. Similarly, code that is obtained from others must be appropriately attributed. However, using substantial amounts of code obtained from someone else will probably not yield full credit for the assignment. Students are responsible for protecting their files from access by others. Work that is essentially the same and submitted without proper attribution may be a violation of academic dishonesty policies by all those submitting the work, regardless of who actually did the work.

Punishment for cheating: First offense will be reported to university administration and will result in zeros for that assignment for all parties involved. Second offense will also be reported to university administration, and will result in a failing grade for the entire course for all parties involved. The university may impose additional penalties.

# **Disability Statement**

Students with disabilities who seek accommodations must make their request by Contacting the Office of Disability Services located at Curtiss 112, or call 964-7000. All accommodations must be approved by The Office of Disability Services. (Verbatim from: Syllabus Statement.)

#### Non-discrimination Statement

SVSU does not discriminate based on race, religion, color, gender, sexual orientation, national origin, age, physical impairment, disability or veteran status in the provision of education, employment and other services. (Verbatim from: Faculty Handbook.)

### Syllabus Change Statement

This syllabus is subject to change if class needs warrant. (Verbatim from: Faculty Handbook.