

## UNION COUNTY COLLEGE MASTER COURSE SYLLABUS

**COURSE NUMBER & NAME:** CST 212 – Programming for Mobile Devices

**LECTURE/LAB HOURS** 3 Lecture Hours

**CREDITS** 3

**PREREQUISITES:** CST 115 or CST 130 or CST 161

**COURSE DESCRIPTION:**

This course provides a strong foundation necessary to build mobile applications for Android devices. This course builds upon key programming concepts, including variables, conditional statements, lists, and arrays, and gives the confidence and technical skills to create fully-functional Android apps.

**COURSE LEARNING OUTCOMES:**

Upon successful completion of this course the student should be able to:

1. Build simple mobile applications for Android devices
2. Implement icons and themes in an application
3. Create control structures in an application
4. Use lists and arrays in an application
5. Implement audio, graphics and animation in an application

**STUDENT RESOURCES:**

Corrine Hoisington, *Android Boot Camp for Developers using Java, Comprehensive: A Beginner's Guide to Creating Your First Android Apps*, 3<sup>rd</sup>. ed.; Course Technology, Cengage Learning 2016, ISBN: 1-305-85799-2  
Flash drive. It is important that you save all your work until your final grade has been received.

Union County College does not discriminate and prohibits discrimination, as required by state and/or federal law, in all programs and activities, including employment and access to its career and technical programs.

**Experiential Learning:**

Students must complete an experiential learning activity that connects course content to career applications. This activity may be a content specific assignment or practical skill that is applied within a course assignment. This assignment supports the general education learning outcomes of scientific/critical thinking and quantitative reasoning; oral and written communication; and information literacy/technological competency.

**Americans with Disabilities Act (ADA):**

Union County College offers reasonable accommodations and/or services to persons with disabilities. Any student who has a documented disability and wishes to self-identify should contact the Coordinator of Disability Support Services at (908) 709-7164, or email [disabilitysvc@ucc.edu](mailto:disabilitysvc@ucc.edu). Accommodations are individualized and in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1992. In order to receive accommodations, students must be registered with Disability Support Services. Students should register with the office as soon as possible. Accommodations are not official until the Faculty Accommodations Alert Form(s) are issued from the student to his/her instructor(s).

**Family Educational Rights and Privacy Act (FERPA):**

The FERPA Statement can be found at <https://www.ucc.edu/admissions/the-family-education-rights-and-privacy-act/>

**COURSE REQUIREMENTS:**

- The successful completion of a tests and final exam.
- The completion of all in-class assignments and projects.
- The completion of all assigned readings and homework.
- Attendance and class participation. Students are required to attend all classes. See the College Attendance Policy discussed in the UCC Catalog.

An essential element of this course includes information literacy. “Information Literacy” is the evaluation and assessment of integrated information. Students will be able to locate, discern, and effectively use information to solve issues and/or problems.

**EVALUATION METHODS:**

Tests	40%
Assignments	40%
Final exam	20%

**Grading:**

A	90 or above	C	70-76
B+	87-89	D+	67-69
B	80-86	D	60-66
C+	77-79	F	below 60

**NOTE:**

The instructor reserves the right to modify the course requirements, assignments, grading procedures and other related policies as circumstances may dictate.

\*\*\*\*STUDENTS WITH PHYSICAL LEARNING DISABILITIES\*\*\*\*

Any student with special needs that will affect performance in this class should feel free to make an appointment to talk with the instructor during office hours (or by appointment) or contact the disabilities counselor in the Counseling office on the Cranford Campus.

## CLASS SCHEDULE:

Time	Topic	Assignments/Readings/Activities
Week 1	Introduction, syllabus, books, storage media, course expectations labs	Reading: Chapter 1 Written Assn: What is information systems, Case Study 1
Week 2	Installing the Android Studio SDK Voilla! Meet the Android	Reading: Continue with Chapter 1 Written Assn: Employment within Information Systems
Week 3	Simplify! The Android User Interface	Research Paper: Explanation Reading: Chapter 2 Written Assn: Review questions, Case Study.
Week 4	Engage! Android User Input, Variables, and Operations	Test 1: Material covered in previous classes Reading: Corresponding chapter 3 Written Assn
Week 5	Explore! Icons and Decision-Making Controls	Reading chapter 4 and Written Assn Review Questions, Case Study
Week 6	Investigate! Android Lists, Arrays, and Web Browsers	Reading: Corresponding chapter 6 Written Assn Review Questions, Case Study
Week 7	Jam! Implementing Audio in Android Apps	Test 2: Material covered in previous classes Readings and written assn. Corresponding chapter, Review Questions, Case Study
Week 8	Reveal! Displaying Pictures in a Gallery	Reading: Corresponding chapter 7 Written Assn Review Questions, Case Study
Week 9	Design! Using a DatePicker on a Tablet	Research Paper: Outline due Reading: Corresponding chapter 8 Written Assn Review Questions, Case Study
Week 10	Customize! Navigating with Master/Detail Flow Activity on a Tablet	Test 3 – Material covered in previous chapters Reading: Corresponding chapter 9 Written Assn Review Questions, Case Study
Week 11	Move! Creating Animation	Reading: Corresponding chapter 10 Written Assn: Review Questions, Case Study
Week 12	Discover! Persistent Data	Reading: Corresponding chapter 11 Written Assn Review Questions, Case Study
Week 13	Finale! Publishing your Android App	Reading: Corresponding chapter 12 Written Assn Review Questions, Case Study
Week 14	Review	Test 4 – Material covered in previous
Week 15		Final Examination

## CLASS POLICIES:

1. Assignments are due by the date posted on the Web calendar. All assignments must be submitted in order to pass the course. Be sure to keep up with the assignments.
2. If you are repeating this course, you must re-create all assignments. Be sure to create new files. Work submitted from a previous semester will not be accepted.
3. Late work will be accepted; however, eleven points will be deducted for each day the assignment is late. No work will be accepted more than three calendar days after the due date. During the last full week of class, no work will be accepted late. Be sure to check the calendar!
4. All tests must be taken. Each test may be taken only one time; so be sure you are prepared to take the test. While taking each test, you must disable any and all pop-up blockers that are enabled. You are on the honor system – no books, notes, or any type of assistance is permitted while taking tests. You may take the test at any time the test is available up to the closing date of the test. Tests cannot be made up. A grade of zero will be given for any test. In order to receive a passing grade, all tests, research paper, and final exam must be taken.
5. To appeal a grade you must send a mail message to the instructor through ANGEL within five days of the posted grade. Overdue appeals will not be considered.
6. It is important for you to log on to the class site a few times a week. Be sure to spend a minimum of eight hours a week completing the work for this class.
7. Any acts of classroom disruption (including that of online courses) that go beyond the normal rights of students to question and discuss with instructors the educational process relative to subject content will not be tolerated, in accordance with the Academic Code of Conduct described in the Student Handbook. See the *Student Handbook* for the policy on “Academic Integrity.” I strongly support the policy regarding academic behavior and disruptive behavior.

## COURSE POLICIES

### *Preparing for Examinations*

Complete the assignments and read the chapters. Most of the questions are taken directly from the reading material. Be sure to check the Key Terms and Review Questions at the end of each chapter. Use the student online companion and take advantage of the “Self-Assessment Test” sections.

### *Appeals Policy*

To appeal a grade, send an email to your instructor’s email address within two weeks of the grade having been received. Overdue appeals will not be considered.

### *Incomplete Policy*

Students will not be given an incomplete grade in the course without sound reason and documented evidence as described in the Student Handbook. In any case, for a student to receive an incomplete, he or she must be passing and must have completed a significant portion of the course.

### *Cheating Policy*

Students are expected to uphold the school’s standard of conduct relating to academic honesty. Students assume full responsibility for the content and integrity of the academic work they submit. The guiding principle of academic integrity shall be that a student’s submitted work, examinations, tests, assignments, papers, and projects must be that of the student’s own work. Students shall be guilty of violating the honor code if they:

1. Represent the work of others as their own.
2. Use or obtain unauthorized assistance in any academic work, including copying disks.
3. Give unauthorized assistance to other students
4. Modify, without instructor approval, an exam, paper, record, or report for the purpose of obtaining additional credit.

5. Misrepresent the content of submitted work.

The penalty for violating the honor code is severe. Any student violating the honor code is subject to receive a failing grade for the course and may be subject to disciplinary action as described in the Student Handbook. If a student is unclear about whether a particular situation may constitute an honor code violation, the student should meet with the instructor to discuss the situation.

For this class, it is permissible to assist classmates in general discussions of computing techniques. General advice and interaction are encouraged. Each person, however, must develop his or her own solutions to the assigned homework and lab exercises. Except when assignments are given as group assignments, students may not “work together” on graded assignments. Such collaboration constitutes cheating, unless it is a grouped assignment. A student may not use or copy (by any means) another’s work (or portions of it) and represent it as his/her own. If you need help on an assignment, contact your instructor, not other classmates.

### **HOMEWORK AND LABORATORY POLICY:**

Although the homework and laboratory assignments comprise 30 percent of the final grade, a student can receive a final grade no greater than a D if all assignments are not submitted. Homework and laboratory assignments receiving less than a 50 percent (F) score are considered not submitted.

No assignments will be accepted more than three days after the due date. Plan to spend approximately eight to twelve hours each week on reading, homework, and laboratory assignments.

Make sure your name, course and section, and assignment (Chapter 1) appear on the first page of a file. Put your name and the date in the upper right corner of a page.

### **DISABILITIES POLICY**

Any student with special needs that will affect performance in this class should feel free to make an appointment to talk with me during office hours (or by appointment) or contact the disabilities counselor in the Counseling office on the Cranford Campus at 908-709-7164.

### **SUGGESTED TEACHING METHODOLOGIES:**

- a. Lecture, group discussion, presentations, multimedia/technology, projects, experiments, demonstrations, etc.
- b. Indication of the percentages or emphasis given to teaching methodologies used will assist faculty members in course preparation and implementation.

### **CORRELATION OF PROGRAM OUTCOMES, COURSE OUTCOMES, AND ASSESSMENT**

<b>Program Outcomes</b>	<b>Course Learning Outcomes</b>	<b>Assessment of Outcomes</b>
Use software methods and algorithmic thinking to design technological solutions for a variety of different fields. Design, implement, test, and evaluate complete, logical programs with documentation that meet defined specifications.	Build simple mobile applications for Android devices Implement icons and themes in an application Create control structures in an application Use lists and arrays in an application	Written: Exams and programming assignments. Verbal: Class discussion and responses, group discussion and responses.

Use current techniques, skills, and tools with computer programming languages to solve real-world problems.	Implement audio, graphics and animation in an application	Written: Exams and programming assignments. Verbal: Class discussion and responses, group discussion and responses