**CEN 4360C ONLINE CRN 17574 FALL (2020100)**

# PROFESSOR:

Name: Lisa Macon, PhD

Office: 2-308

E-mail: [Lmacon@valenciacollege.edu](mailto:Lmacon@valenciacollege.edu)

Phone number: 407-582-1420

Office hours (also by Appointment):

**On campus in 2-308 Virtual (Email and Canvas)**

Monday 1:00 – 3:00pm Monday, Tuesday, Thursday 9:00 – 10:00pm

Tuesday 10:00 – 11:00am Friday 9:00 – 11:00am

Wednesday 1:30 – 2:30pm

Thursday 10:00 – 11:00am

# COURSE:

Name and Catalog description: Mobile Device Software Development

This course covers the concepts and practice of software development for mobile devices with concentration in the user interface, data persistence, data communication, use of APIs for sound, mapping, GPS, sensors, etc. In this professional-level course students are expected to demonstrate use of several SDKs to build and deploy an application that is of significant scope.

CRN: 17574

Credit: 3

# Prerequisite(s) and Co-requisite(s): Grade of C or higher in COP 3330C or COP 2805C

Meeting places and times: ONLINE

# COURSE OUTCOMES:

1. Students will be able to create apps that run on the Android emulator and in the iOS Simulator.
2. Students will be able to utilize online documentation that describes and demonstrates the use of API's.
3. Students will be able to demonstrate knowledge of how the mobile app business functions including the Apple App store and the Google Play store.
4. Students will be able to create mobile applications that use existing API's for communication with onboard sensors and actuators.

# EDUCATIONAL MATERIALS:

Text, title, edition, and author

Students are not required to purchase any books or materials for this course. All materials are available as free resources on the world wide web and are linked in the learning modules.

Software: Students will need to download Android Developer Studio (free download, link in Orientation module) and also have access to an environment on which to develop iOS applications. This will require using a Mac or setting up a virtual machine on your windows machine and installing macOS and Xcode.

# ASSESSMENT METHODS AND EVALUATION:

Calculation of final grade:

Orientation Quiz: 50 points

Introductions Discussion: 50 points

Ten Module discussions: 200 points (20 points each)

Ten Module quizzes: 200 points (20 points each)

Ten Module Assignments: 1000 points (100 points each)

Type of final: There will be no final exam in this class. The final programming assignment and quiz will be due during the final exam period.

Grade Scale:

A: 1350 - 1500 points

B: 1200 - 1349 points

C: 1050 - 1199 points

D: 900 - 1049 points

F: Less than 900 points

# IMPORTANT CALENDAR DATES:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Full Term | H1 | TWJ | TWK | H2 |
| Classes Begin | Aug. 26, 2019 | Aug.26, 2019 | Aug.26, 2019 | Sept. 30, 2019 | Oct. 18, 2019 |
| Drop/Refund/  No Show | Sept. 3, 2019 | Sept. 3, 2019 | Sept. 3, 2019 | Oct. 7, 2019 | Oct. 25, 2019 |
| Graduation Application Deadline | Sept. 13, 2019 | Sept. 13, 2019 | Sept. 13, 2019 | Sept. 13, 2019 | Sept. 13, 2019 |
| Withdrawal  Deadline | Nov. 1, 2019 | Sept. 27, 2019 | Oct. 11, 2019 | Nov. 15, 2019 | Nov. 22, 2019 |
| Day/Evening  Classes End | Dec. 8, 2019 | Oct. 17, 2019 | Nov. 3, 2019 | Dec. 15, 2019 | Dec. 15, 2019 |
| Final Exams | Dec. 9-15, 2019 | Last Class Mtg | Last Class Mtg | Last Class Mtg | Last Class Mtg |
| Term Ends | Dec. 15, 2019 | Oct. 17, 2019 | Nov. 3, 2019 | Dec. 15, 2019 | Dec. 15, 2019 |
| Classes do not meet on Monday September 2, Monday November 11, 2019, and Wednesday November 27 – December 1, 2019 | | | | | |

See College calendar for important dates and final exam schedule at  [http://valenciacollege.edu/calendar](http://www.valenciacollege.edu/calendar) .

# NO-SHOW PROCEDURE:

Any student who does not complete the **Orientation Quiz** by the No-Show deadline will be withdrawn as a no-show.

# CLASSROOM POLICIES ATTENDANCE:

Students who stop turning in work will not be withdrawn and will receive zeros on any work not submitted.

Students who miss a single assignment or discussion will be removed from my recommendation list of students I would write a recommendation letter for or recommend for a scholarship or similar opportunity without possibility of reinstatement for the rest of the semester. I will post frequent announcements and send out regular reminders, so it is recommended that you log into Canvas at least once per day. If you miss vital information because you neglect to do so, that is the chance you personally decided to take. “I didn’t know… because I didn’t log in” will never be considered an acceptable excuse for any purpose.

# WITHDRAWAL:

**After the no-show reporting deadline, I will not withdraw students for any reason. If you want to withdraw, please speak to me first regarding your progress and with an Academic Advisor to discuss the impact of the W on your academic progress, future fees, and financial aid.**

**NOTE:  Before choosing to withdraw, students should speak first with your professor regarding your progress in the course and with an Academic Advisor to discuss the impact of the W on your academic progress, future fees, and financial aid.**

# NOTE TO INTERNATIONAL STUDENTS (F-1 OR J-1 VISA):

Please be advised that withdrawal from this course due to attendance may result in the termination of your visa status if you fall below the full-time enrollment requirement of 12 credit hours. Consult the International Student Services office for more information.

# LATE WORK POLICY:

A student can turn in work up to one week past the deadline for a maximum of 50% credit regardless of the reason for the lateness of the assignment. After one week, no late work will be accepted. There will be no exceptions to this for any reason at all whatsoever. One late or missed assignment will also result in the student being removed from Dr. Macon's "Recommendation List" for job referrals and recommendation letters. Once you are off this list, you cannot be added back onto it for the entire semester.

**Note that this one-week 50% credit period starts one minute after the deadline. There is no grace period.**

# STANDARDS OF CLASSROOM CONDUCT:

Valencia College is dedicated to the advancement of knowledge and learning and to the development of responsible personal and social conduct. By enrolling at Valencia College, a student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct as listed in 6Hx28: 8-03 and the Student Handbook. Even though Faculty manage the classroom environment, the primary responsibility for maintaining a respectful and civil learning environment rests with the students. Students who violate the Student Code of Conduct may be referred to the Dean of Student's Office for disciplinary action, which may result in a sanction up to and including expulsion. <http://valenciacollege.edu/generalcounsel/policy>

# ACADEMIC HONESTY:

You are taking this class to learn important concepts of computer programming. Obviously, if you do not do your own work, you cannot become a programmer as you won’t know the concepts. Therefore, all work you do must be your own. That being said, it is encouraged that you speak to your classmates regarding assignments and bounce ideas off one another. This is fine, and recommended. In spite of this, each assignment you turn in must be your own work. Companies that hire graduates, programs that accept transfer students from Valencia, and scholarship agencies that award funding, depend on me to produce programmers who know the material well when they finish my course and I will not let them (or the future students who can benefit from these programs) down.

Students caught turning in identical assignments will both receive zeros on the assignment, regardless of who copied from who and/or why. A second offense will result in an F in the course and referral to the Dean. Please note that I have myself developed sophisticated software to check your files against each other for identical code and I have caught many, many students cheating in this way in the past. You’re much better off turning in work that isn’t perfect than cheating in this way.

Students caught turning in solutions they have downloaded from an internet site that contains libraries of programming assignments will receive an automatic F in the course and be referred to the Dean. Please note that I use software available in Canvas that checks the entire internet to see if you have plagiarized work.

Students caught posting their homework for hire on sites such as but not limited to fiverr.com will receive an automatic F and be referred to the Dean.

# COLLEGE POLICIES:

A full description of all College policies can be found in the College Catalog at <http://valenciacollege.edu/catalog/> ; Policy Manual at <http://www.valenciacollege.edu/generalcounsel/> .

# STUDENT ASSISTANCE PROGRAM:

Valencia College is interested in making sure all our students have a rewarding and successful college experience.  To that purpose, Valencia students can get immediate help with issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work.  BayCare Behavioral Health Student Assistance Program (SAP) services are free to all Valencia students and available 24 hours a day by calling (800) 878-5470. Free face-to-face counseling is also available.

# OFFICE OF STUDENTS WITH DISABILITIES INFORMATION:

Students with disabilities who qualify for academic accommodations must provide a Notification to Instructor (NTI) form from the Office for Students with Disabilities (OSD) and discuss specific needs with the professor, preferably during the first two weeks of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities.

East Campus Bldg. 5, Rm. 216 Ph: 407-582-2229 Fax: 407-582-8908 TTY: 407-582-1222

West Campus SSB, Rm. 102 Ph: 407-582-1523 Fax: 407-582-1326 TTY: 407-582-1222

Osceola Campus Bldg. 1, Rm. 140A Ph: 407-582-4167 Fax: 407-582-4804 TTY: 407-582-1222

Winter Park Campus Bldg. 1, Rm. 212 Ph: 407-582-6887 Fax: 407-582-6841 TTY: 407-582-1222

# SPECIAL RULES:

This is an online class so you are expected to have your own computing equipment and fast internet connection at home. Note that you can always use the equipment on East Campus if your computer or internet connection is not working. You will not receive an extension for these reasons so please start your work early and plan accordingly.

# DISCLAIMER:

Changes may be made at the discretion of the instructor.

# SCHEDULE OF CLASSES AND/OR LABS:

# All assignments/quizzes/discussions due by 11:59PM on the due date.

|  |  |
| --- | --- |
| **Due Date** | **Details** |
| Tue Sep 3, 2019 | Orientation Discussion  Week 1 Discussion: Introductions |
| Mon Sep 9, 2019 | Mod 1 Intro to Android Dev Discussion |
| Wed Sep 11, 2019 | Mod 1 Getting Started with Android Studio Assignment |
| Fri Sep 13, 2019 | Mod 1 Intro to Android Dev Quiz |
| Mon Sep 16, 2019 | Mod 2 Activities and Colors Discussion |
| Wed Sep 18, 2019 | Mod 2 Activities and Colors Assignment |
| Fri Sep 20, 2019 | Mod 2 Activities and Colors Quiz |
| Mon Sep 23 2019 | Mod 3 Sample Project Discussion |
| Wed Sep 25, 2019 | Mod 3 Build Your Own Game Assignment |
| Fri Sep 27, 2019 | Mod 3 Quiz |
| Mon Oct 7, 2019 | Mod 4 RecyclerView Discussion |
| Wed Oct 9, 2019 | Mod 4 RecyclerView Assignment |
| Fri Oct 11, 2019 | Mod 4 RecyclerView Quiz |
| Mon Oct 14, 2019 | Mod 5 News App Discussion |
| Wed Oct 16, 2019 | Mod 5 Your News App Assignment |
| Fri Oct 18, 2019 | Mod 5 Android Development Quiz |
| Mon Oct 28, 2019 | Mod 6 iOS Getting Started Discussion |
| Wed Oct 30, 2019 | Mod 6 Simple App Assignment |
| Fri Nov 1, 2019 | Mod 6 iOS Getting Started Quiz |
| Mon Nov 4, 2019 | Mod 7 iOS Views and Elements Discussion |
| Wed Nov 6, 2019 | Mod 7 iOS Views and Elements Assignment |
| Fri Nov 8, 2019 | Mod 7 iOS Views and Elements Quiz |
| Mon Nov 11, 2019 | Mod 8 Stack View Discussion |
| Wed Nov 13, 2019 | Mod 8 Stack View Assignment |
| Fri Nov 15, 2019 | Mod 8 Stack View Quiz |
| Mon Nov 18, 2019 | Mod 9 Swift Discussion |
| Wed Nov 20, 2019  Fri Nov 22, 2019 | Mod 9 Swift Assignment  Mod 9 Swift Quiz |
| Wed Dec 4, 2019 | Mod 10 Final App Dev Discussion |
| Mon Dec 9, 2019 | Mod 10 Iterations/Logic Assignment |
| Wed Dec. 11, 2019 | Mod 10 Iterations/Logic Quiz |