

Casper College Course Syllabus
COSC 2405 — User Interface Design (Android Programming)
Fall 2015

Lecture hours: 2

Class time: 12–12:50 p.m.

Instructor's name: Kevin Lenth

Office hours: M 1–2,
T 11–12 & 1–2,
W/Th/F 11–12

Lab hours: 0

Days: TTh

Office: PS 335

Office phone: 268-2519

Credit hours: 2

Room: PS 325

E-mail: lenthk@caspercollege.edu

Course Description

An intermediate-level course in developing graphical applications for a modern operating system. Through a series of hands-on activities, students will gain experience in designing, implementing, and debugging user interfaces for practical applications. The use of a wide variety of user interface components will be covered together with best practices for the platform of interest. The emphasis of this course is on creating clean, usable interface designs rather than producing the most technically capable implementation.

Prerequisites

COSC 1010 or consent of instructor

Goal

This course introduces the standard constructs and techniques used for developing apps on the Android mobile platform.

Outcomes

General education

This course meets the following Casper College general education outcomes:

3. Solve problems using critical thinking and creativity
5. Appreciate aesthetic and creative activities

Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.

Course objectives

Upon successfully completing this course, students will be able to

- * build, deploy, and debug Android apps;
- * design user interfaces using the tools and APIs of the Android platform.

Methodology

This class is presented as a series of open-ended and interactive demonstrations of programming apps supplemented by occasional lectures on important concepts of Android app design.

Evaluation Criteria

The grade breakdown is as follows.

<i>Projects</i>	6 × 15%
<i>Attendance</i>	10%

Final grades will follow the usual 60/70/80/90 scale (90% or higher is an A, etc.) with the following exception:

- * Students who demonstrate dedication to the course (i.e., good attendance, much class participation, frequent office hour visits) may have their final grade bumped upward in borderline cases at the instructor's discretion.

A *project* will be assigned for each unit of the class. A project consists of designing, building, and debugging an Android app making use of the features of the current unit (and typically of previous units as well). The purpose of the app is up to the student, although suggestions will be provided. Students may work in pairs on projects if they desire.

The grading of projects is performed according to the following rubric:

<i>Weight</i>	<i>Requirements</i>
50%	The submission correctly and completely implements the desired behavior
30%	The interface of the app is logical and follows common Android app design conventions
10%	The submission is adequately commented and easy to read
10%	A sufficient narrative document is supplied

Project submissions must be accompanied by a *narrative document*, a brief description of the purpose of the app along with a discussion of the process of writing and designing it (challenges, mistakes found, additional resources used, etc.). Extra credit may be earned on programming assignments if the program goes above and beyond in some way, e.g. by having substantial additional capabilities or making use of independently researched techniques.

Required Text, Readings, and Materials

No textbook is required for this class. Extensive use will be made of online resources such as the [Android API reference](#) and the [CodePath Android Cliffnotes](#).

The course Moodle shell (accessible from <https://moodle4me.caspercollege.edu/>) will be used extensively: projects, supplementary materials, resources, and announcements will be posted thereon.

Class Policies

Last Date to Audit or Withdraw: November 12th

Attendance. Every student is expected to attend every class meeting with punctuality. Every unexcused absence beyond the fourth will result in a 25% penalty to the attendance grade.

Class participation. All students are expected to participate actively in class; this entails asking questions and being receptive to questions asked by the instructor. Students are also expected to use the classroom computers for purposes related to class, i.e. taking notes and following along in examples. Excessive or disruptive use of the computers for non-class-related activities will result in ejection from the class.

Late assignments. Projects will be accepted up to five days after their due date with a penalty of 10% credit for each day.

Syllabus emendation. The instructor reserves the right to amend this course syllabus at any time. If this occurs, an announcement will be made and the modified syllabus will be made available to the class.

Student Rights and Responsibilities

Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College student.

Chain of Command

If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head, the Dean, and lastly the Vice President for Academic Affairs.

Academic Dishonesty

Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

Official Means of Communication

Casper College faculty and staff will employ the student's assigned Casper College e-mail account as a primary method of communication. **Students are responsible for checking their account regularly.**

The instructor's e-mail address is lenthk@caspercollege.edu (*not* klenth@caspercollege.edu); e-mail is the best method of contacting the instructor outside of class or office hours. Class announcements will be made via the course's Moodle shell.

ADA Accommodations Policy

If you need academic accommodations because of a disability, please inform the instructor as soon as possible. See him privately after class or during his office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, room 344, (307) 268-2557, bheuer@caspercollege.edu. The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

Course Calendar

<i>Week(s)</i>	<i>Topic</i>
1–3	Android basics: activities, views, and intents
4–6	Compound views: lists and spinners
7–9	Drawing
10–11	Persistence
12–13	Advanced activities and themes
14–15	Cool stuff (per student interest)