

CS 347: Mobile Application Development
College of Arts & Sciences Syllabus

COURSE INFORMATION

Credit Hours: 3

Course Description: This course covers programming applications for mobile platforms. Students will learn about mobile application environments and platforms and how to design and develop applications to account for the limited screen size, memory, and access to the internet. Students will incorporate graphics, networking, security, media to create new, real world, practical applications. Development, design, implementation, testing, debugging, and maintaining these applications will also be covered. Students will use a variety of programming languages to create these applications.

Course Prerequisites: CS207 and CS300 with a minimum grade of C.

FACULTY INFORMATION

Instructor: Rachel Adler

Office Location: LWH 3047

Office Hours: Tuesdays 10am – 12:45pm and Thursdays 12:15pm – 1:30pm or by appointment

Phone Extension: x4710 (email is the best way to reach me!)

E-mail: r-adler@neiu.edu

COURSE MATERIALS

Course Website: <http://cs.neiu.edu/~radler/cs347>

List of Required Texts / Materials:

1. Head First Android Development by Dawn Griffiths and David Griffiths publisher: O'Reilly
2. iOS Programming The Big Nerd Ranch Guide by Christian Keur and Aaron Hillegass 5th Edition, publisher: Pearson

Additional Readings:

- Android Developer's website: developer.android.com
- Apple Developer's website: developer.apple.com

MAJOR COURSE TOPICS

- Android App Development
- iOS App Development

COURSE OBJECTIVES / STUDENT LEARNING OUTCOMES

- Provide the concepts and practice necessary to effectively develop mobile applications on the Android platform.
- Provide the concepts and practice necessary to effectively develop mobile applications on the iOS platform

STUDENT TASKS / ASSIGNMENTS / REQUIREMENTS

Assignments:

Create mobile apps using Android and iOS platforms.

Projects:

Build a complete app in both Android and iOS. The apps should be complete and easy to use.

Grading Policies and Formulae:

Labs and Assignments	35%
Projects	40%
Quizzes	25%
90-100%	A
80-89%	B
70-79%	C
60-69%	D
0-59%	F

Course Outline:

Week	Topic	Textbook Chapter
1	Introduction to Android Development	Chapter 1 (Android Textbook)
2	Building Interactive Apps	Chapter 2
3	The User Interface: Widgets Multiple Activities and Intents	Chapter 3
4	The User Interface: Layouts	Chapter 5
5	The Activity Lifecycle List Views and Adapters	Chapter 4 Chapter 6
6	Fragments	Chapter 7
7	Android Quiz / Work on Project	
8	Android Project Presentations	
9	Introduction to iOS Development	
10	First iOS App	Chapter 1 (iOS Textbook)
11	The Swift Language	Chapter 2
12	Views / Text Input	Chapters 3-4
13	View Controllers (Multiple Screens) / Delegate	Chapter 5 / End of Chapter 4
14	UITableView	Chapter 9
15	iOS Quiz / Work on Project	
Finals Week	iOS Project Presentations	

COURSE POLICIES AND STATEMENTS

Absence Policy:

Students are expected to attend all scheduled classes.

Academic Integrity Policy:

By enrolling in this course, you are bound by the NEIU Student Code of Conduct: <http://www.neiu.edu/university-life/student-rights-and-responsibilities/student-code-conduct>. You will be informed by your instructor of any additional policy specific to your course regarding plagiarism, class disruptions, etc.

ADA Statement:

Northeastern Illinois University (NEIU) complies with the Americans with Disabilities Act (ADA) in making reasonable accommodations for qualified students with disabilities. To request accommodations, students with special needs should make arrangements with the Student Disability Services (SDS) office, located on the main campus in room D104. Contact SDS via (773) 442-4595 or <http://www.neiu.edu/university-life/student-disability-services>.

Campus Safety:

Web links to Campus Safety: Emergency Procedures and Safety Information can be found on *NEIUport* on the MyNEIU tab or as follows: http://homepages.neiu.edu/~neitemp/Emergency_Procedures/MainCampus/.

Additional Academic Integrity Policy:

All assignments must be the student's own work. If you copy homework, you and the student whose homework you copied will receive a zero. Two students may not submit the same homework. If you are caught copying another student's exam, or allowing someone to copy your exam, you will fail the exam and face further academic discipline.