



Graduate Course Syllabus

IT 633: Mobile Application Development

Center: Online

Course Prerequisites

IT 511

Course Description

This course examines the development of mobile applications, including mobile application frameworks, effective mobile application design, and data persistence. Students will construct a mobile application for the Android, iOS, or Windows mobile application market using Java, C# or Objective-C.

Course Outcomes

- Design mobile applications that address organizations' needs based on translation of organizational requirements
- Justify the selection of mobile application frameworks for specific projects based on given sets of parameters
- Defend appropriate approaches to mobile application development based on analysis of the key characteristics of mobile operating systems
- Develop mobile applications that address human-computer interface challenges for specific audience and business requirements
- Address common challenges in mobile application development through application of ethical and professional programming practices

Required Materials

These resources are available through the Shapiro Library. Click the links below to access your resources.

[Android Application Development for Java Programmers](#)

James C. Sheusi

Cengage Learning

2013

ISBN: 978-1-133-59354-6

[Android Design Patterns: Interaction Design Solutions for Developers](#)

Greg Nudelman

John Wiley & Sons

2013

978-1-118-39415-1

Software Requirement

Students will access the Android application, its build-tools and additional packages as installed in Android Studio through the Virtual Desktop. To Log in to the Virtual Desktop, follow these [instructions](#).

Android Studio

Android Developer

<https://developer.android.com/sdk/index.html>

Java Software Development Kit

Oracle

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

Diversity, Equity, and Inclusion

As indicated in our core values, SNHU is committed to “embrace diversity where we encourage and respect diverse identities, ideas, and perspectives by honoring difference, amplifying belonging, engaging civilly, and breaking down barriers to bring our mission to life.”

This may or will be reflected in SNHU’s curriculum as we embrace and practice diversity, equity, and inclusion (DEI) to provide the most transformative experience for our students, faculty, and staff. Because topics pertaining to DEI can be sensitive, please remember that embodying and practicing diversity, equity, and inclusion is one of our core values that you will encounter throughout the academic experience. In higher education, we are expected to think and engage critically. Use a growth mindset to embrace the diverse readings, course assignments, and experiences of your peers and faculty.

For more information about DEI at SNHU, please visit our website at the [Office of Diversity and Inclusion](#).

Instructor Availability and Response Time

Your class interaction with the instructor and your classmates will take place on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions discussion topic so that your questions and the instructor’s answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours. Instructors will post grades and feedback (as applicable) within seven days of an assignment’s due date, or within seven days of a late submission.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussions	7	30	210
Final Project Journals	4	50	200
Assignments	3	50	150
Check-In Journals	4	10	40
Final Project Part I			
Milestone	1	50	50
Final Submission	1	225	225
Final Project Part II			
Final Submission	1	125	125
			Total Course Points: 1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Graduate

Grade	Numerical Equivalent	Points
A	93–100	4.00
A-	90–92	3.67
B+	87–89	3.33
B	83–86	3.00
B-	80–82	2.67
C+	77–79	2.33
C	73–76	2.00
F	0–72	0.00
I	Incomplete	
IF	Incomplete/Failure *	
W	Withdrawn	

* Please refer to the [policy page](#) for information on the incomplete grade process.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Assignment Guidelines and Rubrics section of the course.

Weekly Assignment Schedule

All reading and assignment information can be found within each module of the course. Assignments and discussion posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module.

Module	Topics and Assignments
1	<p>Introduction to Mobile Application Development</p> <p><i>Android Design Patterns: Interaction Design Solutions for Developers</i>, Chapter 1</p> <p>1-1 Discussion: Android App Design</p> <p>1-2 Final Project Review</p> <p>1-3 Final Project Journal: Preparing for the Final Project</p> <p>1-4 Explore Your Course Tools</p>
2	<p>Designing Mobile Apps</p> <p><i>Android Design Patterns: Interaction Design Solutions for Developers</i>, Chapter 4</p> <p><i>Android Application Development for Java Programmers</i>, Chapter 3</p> <p>2-1 Assignment: Project Scope and Pseudocode</p> <p>2-2 Final Project Journal: Graphic User Interface Mockups</p>
3	<p>Fragmentation and Pseudocode</p> <p><i>Android Design Patterns: Interaction Design Solutions for Developers</i>, Chapter 3</p> <p><i>Android Application Development for Java Developers</i>, Chapter 4</p> <p>3-1 Discussion: Fragmentation</p> <p>3-2 Final Project Journal: Mobile Application Pseudocode</p> <p>3-3 Check-In Journal: Final Project (Part I)</p>
4	<p>Design Patterns and Anti-Patterns</p> <p><i>Android Design Patterns: Interaction Design Solutions for Developers</i>, Chapters 5 and 6</p> <p>4-1 Assignment: Welcome Experience and Home Screen</p> <p>4-2 Final Project Journal: Function and Requirements</p> <p>4-3 Check-In Journal: Final Project (Part I)</p>
5	<p>Designing With Search Patterns</p> <p><i>Android Design Patterns: Interaction Design Solutions for Developers</i>, Chapter 7</p> <p>5-1 Assignment: Designing Search Functionality</p> <p>5-2 Final Project Part I Milestone One: Functioning Mobile Application</p>
6	<p>Designing With Sort and Filter Patterns</p> <p><i>Android Design Patterns: Interaction Design Solutions for Developers</i>, Chapter 8</p> <p>6-1 Discussion: Sorting and Filtering Design Patterns</p> <p>6-2 Check-In Journal: Final Project (Part II)</p>
7	<p>Ensuring Accurate Results</p> <p><i>Android Design Patterns: Interaction Design Solutions for Developers</i>, Chapter 9</p> <p>7-1 Discussion: Design Patterns and Anti-Patterns to Ensure Accurate Results</p> <p>7-2 Final Project Part I Final Submission: Android Mobile Application with Annotated Source Code</p>
8	<p>Data Entry Design Patterns</p> <p><i>Android Design Patterns: Interaction Design Solutions for Developers</i>, Chapters 10 and 11</p> <p>8-1 Discussion: Data Entry Issues</p> <p>8-2 Check-In Journal: Final Project (Part II)</p>

Module	Topics and Assignments
9	Navigation Design Patterns <i>Android Design Patterns: Interaction Design Solutions for Developers</i> , Chapter 13 9-1 Discussion: Navigation Design Patterns and Anti-Patterns 9-2 Final Project Part II Final Submission: Design Defense
10	The Future of Mobile Application Development <i>Android Design Patterns: Interaction Design Solutions for Developers</i> , Chapters 12 and 14 10-1 Discussion: Reflection

Attendance Policy

Online students are required to submit a graded assignment/discussion during the first week of class. If a student does not submit a graded assignment/discussion during the first week of class, the student is automatically dropped from the course for non-participation. Review the [full attendance policy](#).

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the [full late assignment policy](#).

SNHU Student Handbook

Review the [student handbook](#).

ADA/504 Compliance Statement

Southern New Hampshire University (SNHU) is dedicated to providing equal access to individuals with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 and with Title III of the Americans with Disabilities Act (ADA) of 1990, as amended by the Americans with Disabilities Act Amendments Act (ADAAA) of 2008.

SNHU prohibits unlawful discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities. The university has adopted this policy to provide for prompt and equitable resolution of complaints regarding any action prohibited by Section 504, the ADA, or the ADAAA.

For questions about **support services, documentation guidelines, general disability issues, or pregnancy accommodations**, please visit the [Online Accessibility Center](#) (OAC).

As a student, you must complete an interactive intake process, with supporting documentation, in order to be granted accommodations. Once reasonable accommodations are approved by the OAC, you will receive an accommodations letter. You are then responsible for sharing the letter with your instructor. Accommodations are not retroactive.

If you feel you've been subject to discrimination on the basis of disability, by any party, you may file a complaint or grievance. For more information on the ADA/504 Grievance Policy, go to the [Disability and Accessibility Services](#) website.

Academic Integrity Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the [full academic integrity policy](#).

Copyright Policy

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the [full copyright policy](#).

SNHU Withdrawal Policy

Review the [full withdrawal policy](#).

Southern New Hampshire University Policies

More information about SNHU policies can be found on the [policy page](#).