Boston University Metropolitan College

Mobile Application Development
MET CS 683
Course Format – At Hanscom Air Force Base
Mondays 6PM-9PM
Fall 2015

Instructor: Mehrdad (Mike) Nourai
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Office hours: by appointment

Course Description
The course will be divided into two parts. The first part, two thirds of the course, covers the principles and problems associated with mobile device applications, using as examples Google Android, iPhone, and other platforms such as Nokia. The last third is an in depth coverage of the open source Android development platform. Issues covered will include Mobile Hardware and Cell Networks, Architectures, Operating Systems, Languages, Development Environments and Simulators, User Interfaces, Location-based Services, Storing and Retrieving Data. Students will accomplish the following. (1) Learn the unique set of problems and challenges in developing mobile applications compared with desktop applications; (2) Learn the platform, tools, technology and process for developing mobile applications using Google Android and the Apple iPhone platforms as the main examples; (3) Write applications for the platforms covered, simulate them, and test them on the mobile hardware where possible. 4 credits.

Prerequisites:
MET CS 342 or instructor's consent.

Text Book
There is no required textbook, however, online resources and readings will be assigned throughout the semester.

Courseware
Blackboard website: https://learn.bu.edu/

Class Policies
1) **Attendance & Absences** – Attendance is expected at all class meetings, it is your participation grade. You are responsible for ALL the materials discussed in class.
2) **Assignment Completion & Late Work** – All student submissions of required course work must be submitted electronically (paperless) to the class Blackboard website on or before the published due date. Late work will not be accepted and no credit will be given for any missing work or work submitted after published due dates. Exceptions may be made in case of an illness or an emergency condition, however, a verifiable documentation is required. It is students' responsibility to keep secure backups of all required course work.

3) **Quizzes and Exams** – No makeup quizzes and exams will be given. Exceptions may be made in case of an illness or an emergency condition, however, a verifiable documentation is required. No electronic or computer devices such as Smartwatch, Smartphone, Tablet, laptop, or netbook (calculator is OK) can be used during quizzes and exams. Violations results in no credit for the exams, see Academic Conduct Code.

4) **Classroom Expectations** – Please do: respect your classmates by silencing your cell phone or other electronic devices before class begins, and don't use them during class; be on time, lateness always disrupts learning; participate, ask questions, and interact with your classmates and your professor.

5) **Academic Conduct Code** – Please use the following wording, or an equivalent, in your syllabus: "Cheating and plagiarism will not be tolerated in any Metropolitan College course. They will result in no credit for the assignment or examination and may lead to disciplinary actions. Please take the time to review the Student Academic Conduct Code: http://www.bu.edu/met/metropolitan_college_people/student/resources/conduct/code.html. This should not be understood as a discouragement for discussing the material or your particular approach to a problem with other students in the class. On the contrary – you should share your thoughts, questions and solutions. Naturally, if you choose to work in a group, you will be expected to come up with more than one and highly original solutions rather than the same mistakes."

Objectives

The objectives are listed in the course description.

Additional reading materials may be assigned for each topic. Students are responsible for ALL the materials covered. Reading before and after class is essential to succeed in this course.

Course Requirements
- Class participation
- Reading and study
- Project
- Quizzes

Grading Criteria

The grade that a student receives in this class will be based on class participation, project, and quizzes. The grade is breakdown as shown below. All percentages are approximate and the instructor reserves the right to make necessary changes.
- 10% on class participation
- 30% on Quizzes
- 60% on semester-long project (3 deliverables and presentation)

Boston University Metropolitan College

Letter grade/numerical grade conversion is shown below:

A (95-100)	A- (90-94)	
B+ (85-89)	B (80-84)	B- (77-79)
C+ (74-76)	C (70-73)	C- (65-69)
D (60-64)		
F (0 – 59)		

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Class Meetings, Lectures & Assignments:
Note: This is a tentative schedule and a live document.
Lectures, Readings, and Assignments subject to change, and will be announced in class as applicable within a reasonable time frame.

Date	Topic	Readings Due	Assignments Due
September 14	Introduction I	Online materials	
September 21	Introduction II		
September 28	User Interface I	Online materials	
October 5	User Interface II		**Project functional spec Due (Deliverable 1)**
October 12	**Holiday, classes suspended**		
October 19	Storage I	Online materials	
October 26	Storage II		**Quiz 1 - Covered Materials**
November 2	Events and Services I	Online materials	
November 9	Events and Services II		**Project technical spec Due (Deliverable 2)**
November 16	Threads and Communications I	Online materials	
November 23	Threads and Communications II		
November 30	Graphics and Animation I	Online materials	**Quiz 2 - Covered Materials**
December 7	Graphics and Animation II		
December 14	Project Presentations		**Final Project Due (Deliverable 3)**