Information Systems Department University of Maryland Baltimore County Baltimore Maryland 21250 Departmental Office: room ITE 404 ph. 410-455-3206

## IS 413- Section 1 GUI Systems Using Java (now with added Android Programming for Mobile Applications) <u>Fall 2017</u>

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<u>Meeting Times</u>: Section 1 Fridays 9-11:30 am. Sept 1- Dec 15 see schedule below. Room as assigned in <u>schedule of classes</u>

<u>Textbook</u>: From the IS147/247 text "Introduction to Java Programming Comprehensive Version" by Y. Daniel Liang 10<sup>th (or 11th)</sup> edition from Pearson, we will use chapters 13-16. We will also use: "Android Boot Camp for Developers Using Java" 3rd Edition 2016 by Corinne Hoisington from Cengage Publishing. **ISBN-10:** 1305857992

<u>Course Description :</u> "This course introduces the student to graphical user interface systems using the most current version of Java. Students will learn to implement a series of interactive stand-alone or webbased interfaces. Event handling and multi-threaded Java programs will be studied. Image and data transmission via the internet will be presented. Students will read articles from the current research literature that offer guidelines in interface design. Familiarity with UNIX file and directory manipulation is recommended. Prerequisite: Must complete IS247 or CMSC202 w/ a C or better. "

IS 413 counts as a third semester of programming for the IS BS majors.

In addition to Java GUI development with FX components: This course is an introduction to using Android as a development tool for creating mobile apps. We will be using the Android plugin for IntelliJ as our development environment and will incorporate programming concepts for mobile devices in creating small, fast running applications. You do not have to have an Android phone or device to be able to take this course.

Instructional Methods : Discussion, Lectures, Demonstrations and lots of hands-on programming!

<u>Attendance and Participation :</u> Regular and punctual attendance is expected of all students. In the case of absence due to emergency (illness, death in the family, accident), religious holiday, or participation in official College functions, it is the student's responsibility to confer with the instructor about the absence and missed course work.

<u>Class Preparation</u>: All of the reading and homework assignments should be completed before the class in which the material is to be discussed.

<u>Course Requirements:</u> Regular Punctual Attendance, Class Assignments & Homework, Tests, & Programming Projects.

**<u>Grading:</u>** You will be completing a series of programming projects accounting for 45% of your overall grade. You will work on a group project which will include a peer evaluation and presentation. This will account for 10% of your overall grade.

There will be 2 exams covering all of the material presented in the course. The first test covers the JavaFX material and will be worth 20% and the second test will cover Android and will account for 25% of your overall grade. The two tests in total then are 45% of your final grade.

IS instructors are expected to have exams and evaluations which result in a reasonable distribution of grades. With respect to final letter grades, the University's Undergraduate Catalogue states that, "A, indicates superior achievement; B, good performance; C, adequate performance; D, minimal performance; F, failure" There is specifically no mention of any numerical scores associated with these letter grades. Final letter grades in this course conform to the University's officially published definitions of the respective letter grades. In accordance with the published University grading policy, it is important to understand that final letter grades reflect academic achievement and not effort. While mistakes in the arithmetic computation of grades and grade recording errors will always be corrected, it is important to understand that in all other situations final letter grades are not negotiable and challenges to final letter grades are not entertained.

For this course it is anticipated that "A" grades may be in the 90-99 range, "B" grades may be from 80-89 and "C" grades range from 70-79. All points are additive. Each student starts at zero points which is an "F", any other grade must be earned. **There will be no extra credit assignments available.** 

**Due Dates:** All assignments are to be handed in by the due date. If an assignment is not in on time it may possibly be accepted the following class with an accompanying reduction of 50% of the earned grade. Due to some scheduling issues some late assignments may not be accepted at all with a result in a total loss of points.

**Inclement Weather:** Any work or test due on a class date that has been canceled due to inclement weather will be due the next class meeting. (If the semester's last exam is postponed, it will be given during the time period assigned by the University.)

<u>Make-up Policy:</u> Exams: No make-up exams except through arrangement with the instructor: and then for reasons deemed valid enough to warrant the making of a new, and potentially harder, test.

<u>Academic Integrity:</u> By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabricating, plagiarism, and helping others to commit these acts are all forms of academic dishonesty and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. Full policies on academic integrity should be available in the UMBC Student Handbook, Faculty Handbook, or the UMBC Directory.

## **Disability Statement:** Student Disability Services (SDS)

UMBC is committed to eliminating discriminatory obstacles that may disadvantage students based on disability. Services for students with disabilities are provided for all students qualified under the Americans with Disabilities Act (ADA) of 1990, the ADAAA of 2009, and Section 504 of the Rehabilitation Act who request and are eligible for accommodations. The Office of Student Disability Services (SDS) is the UMBC department designated to coordinate accommodations that would allow students to have equal access and inclusion in all courses, programs, and activities at the University.

If you have a documented disability and need to request academic accommodations, please refer to the SDS website at <u>sds.umbc.edu</u> for registration information and to begin the process, or alternatively you may visit the SDS office in the Math/Psychology Building, Room 212. For questions or concerns, you may contact us through email at <u>disAbility@umbc.edu</u> or phone (410) 455-2459.

If you require accommodations for this class, make an appointment to meet with me to discuss your SDSapproved accommodations.

Dates	Material Covered	Work Due
Fridays: Sept 1	Introduction to the Course & IDE's	In Class: Assignment 1
Sept 8	Chapter 13 Interfaces	Assignment 2
Sept 15	Chapter 14 FX basics	Assignment 3
Sept 22	Chapter 15 Events	Assignment 4
Sept 29	Chapter 16 Controls	Assignment 5
Oct 6	JavaFX Test	TEST 1
Oct 13	Intro to Android & Boot Camp Chapter 1	Assignment 6
Oct 20	ABC Chapter 2- Android Interface	
Oct 27	ABC Chapter 3- User Inputs	Assignment 7
Nov 3	ABC Chapter 4-Icons and Decision Controls	
Nov 10	ABC Chapter 5-Lists, Arrays, Browsers	Assignment 8
Nov 17	ABC Chapter 6-Audio Controls	
Nov 24	Thanksgiving Day Off	
Dec 1	ABC Chapter 7-Pictures in Gridviews	Assignment 9
Dec 8	Group Presentations	TEST 2
Dec 15	Finals Week Period	If needed

## COURSE SCHEDULE (Schedule subject to change)