IS413 Syllabus

IS 413-01 (1810) - Fall 2018

Instructor Information

Instructor Email Office Location and Hour

Benjamin Houdeshell houdesh1@umbc.edu TBD

General Information

Meeting Time

IS 413 (GUI Systems Using JAVA) - Information Technology Room 237 - Thursday's at 7:10PM to 9:40pm

Required Textbook

- Introduction to Java Programming Comprehensive Version. 10th edition. by Daniel Liang, Pearson, we will use chapters 13-16.
- Android Boot Camp for Developers Using Java 3rd Edition 2016 by Corinne Hoisington from Cengage Publishing. ISBN-10: 1305857992

Description

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 Web-based 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. Requirement you must complete IS 247 or CMSC 202 w/a C or better.

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!

Class Preparation:

All of the reading and homework assignments should be completed before the class in which the material is to be discussed.

Blackboard site

A Blackboard site will be maintained for the course throughout the semester. It can be accessed through myUMBC or at

• http://blackboard.umbc.edu

The page will contain all project deliverable descriptions, lecture slides, solutions to exams, grades and all announcements pertinent to the course. Each student is responsible for checking the web page regularly, and for being aware of any information posted there.

Attendance and Participation

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

Grading

The University's Undergrauate Catalog states that grades of "A", "B", and "C" are passing and grades of "D" and "F" indicate failure. There is specifically no mention of any numerical scores associated with these letter grades. Consequently, there are no pre-defined numerical boundaries that determine final letter grades. These boundaries can only be defined at the end of the semester after all scores have been earned. At that point, boundaries for final letter grades can be defined such that they conform to the University's and Information System Department's official guidelines. This means that it is not appropriate to assume that a given numerical score corresponds to a particular letter grade. Historical data suggests an "A" may be in the 90-100 range, a "B" may be from 80-89 and "C" grades range from 70-79.

It is also important to understand that final letter grades reflect academic achievement and not effort.

While I am more than happy to correct mistakes in the computation of grades and grade recording errors, in all other situations final letter grades are not negotiable.

A student's final course grade will be based on scores received on the homework assignments, exams, quizzes, project and class participation, as follows:

- (45%) Homework assignments: This class will have several programming assignments. The assignment and due dates will be made available on Blackboard. Assignment solutions should be submitted on Blackboard. Assignments are due at the beginning of class on the day they are due. The Blackboard link to submit assignments will expire at the beginning of class on the day the homework is due. The assignment handout will contain further instructions on how to submit the soft-copy of your assignment on Blackboard. Email submissions will not be accepted.
- (20%) Project: The course will have one project. The project puts together several of the concepts you learn throughout the semester. More details on the project will be given later in the semester (see schedule for deliverable due dates, the project handout will contain further details).
- (30%) Exams: 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 15% and the second test will cover Android and will account for 15% of your overall grade. The two tests in total then are 30% of your final grade.

Please check the schedule for the dates. In general, <u>make up exams will not be given</u>. If you know that you will have to miss an exam in advance, talk to me about it. If I am given sufficient notice, and I agree that your absence cannot be avoided, then I can arrange a makeup exam. If you miss an exam due to an unforeseen emergency, then we can arrange a makeup exam if I agree that your absence was due to a bona fide emergency and you can document that emergency to my satisfaction. In all cases, you should be warned that makeup exams are generally more difficult and more prone to errors and misunderstandings than the original exam, simply because I do not have the time to devote to writing a makeup exam as carefully as I do other exams.

• (5%) Class participation: This portion of the grade is a subjective assessment of a student's contribution to class discussions and exercises, participation with in class work, punctuality, willingness to seek help from classmates and from me, and ability to conduct himself/herself appropriately.

During the semester, students will be asked to submit their in-class lab programs. The submitted work will be graded towards this component of the student's grade.

Course Policies

Class format and attendance

Since we have a 2 and a half hour class, most times, the class will be split into two sessions with a mini 5-minute break. Students are strongly encouraged to ask questions and participate in class activities. While attendance is not required, you are strongly encouraged to attend all lectures. If you miss a class, you are responsible for getting the relevant notes and hand outs to help you prepare for the quizzes and exams. Please come to class on time. There may be in-class discussions and material covered in lectures that will not be available on the textbook and on the Web page. You will be responsible for that material in the quizzes and the exams. You are therefore encouraged to attend all lectures.

Late policy

The due dates are to be taken seriously and you should not expect them to be extended. However, there might be various circumstances because of which you may not be able to submit a particular assignment on time. Late assignments will always be penalized as it is not fair to the other students who sacrificed their sleep and spent time to submit the assignment on time. I also believe that a late assignment is better than no assignment.

With this in mind, the following late policy will be implemented in this course: Late assignments will be penalized 10% off the total possible points if turned in within the first 24-hour period after the specified due date and time, and 5% per 24-hour period (or fraction of a day) (including weekends) after that time, up to three days after the due date. Late assignments will be accepted with penalty up to three days after the due date. Assignments submitted at any later time will not be accepted. It is up to you to determine the version of your assignment to be graded. You must weigh the late penalty against the completeness of your assignment.

When turning in an assignment late, you should email the homework material to me. Your homework submission time will be determined by the time stamp on the email with your homework material received by me. This is the only situation in which homework submissions will be accepted by email.

Readings

The readings posted on the syllabus are assigned to students as reading materials. Students are expected to read the readings posted on the syllabus for a particular class day before the class meeting.

Cell Phones, Beepers, and Other Devices

All cell phones and beepers must be turned off during class ("vibrate" mode is okay). If you must make a call, please leave the classroom. If you disrupt the class you will be asked to leave the classroom. An occasional email check is unavoidable and I understand this, but make sure you avoid browsing the web, chatting, Facebook and excessive email checking while in class. I will know when you are engaged in these activities, and if I find your behavior disrupting, I will ask you to leave the classroom.

Getting Help-Questions and Concerns

Email is the BEST way to get in touch with me. I will try to answer your email as soon as possible. When I send out emails to the class on the class list, make sure you are receiving them. You are encouraged to use your UMBC email account for all e-mail correspondence.

You are strongly encouraged to make use of my office hours (listed above) to go over any issues you are having with the course or the course material. In addition to the listed office hours, I am also available by appointment, which means that you should email me before stopping by my office to make sure that I will be in.

Inclement weather policy

In case of inclement weather, check the main UMBC Webpage (http://www.umbc.edu) to see whether UMBC is closed and classes are cancelled. In the event of such cancellation on an exam day, the exam will be rescheduled and announced to the students by the instructor. If there is a deliverable due on that day, there will be no extension for the deliverable. You should still submit the softcopy (in PDF) of your deliverable on time. If the assignment has a hard copy deliverable, the due date for the hardcopy of your deliverable will be automatically be before start of class on the day of the next class.

Student Services

UMBC is committed to eliminating discriminatory obstacles that disadvantage students based on disability. Student Support Services (SSS) is the UMBC department designated to receive and maintain confidential files of disabilityrelated documentation, certify eligibility for services, determine reasonable accommodations, develop with each student plans for the provision of such accommodations, and serve as a liaison between faculty members and students regarding disability-related issues. If you have a disability and want to request accommodations, contact SSS in the Math/Psych Bldg., room 213 or at 410-455-2459. SSS will require you to provide appropriate documentation of disability. If you require accommodations for this class, make an appointment to meet with me to discuss your SSS-approved accommodations."

Academic Honesty

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, fabrication, 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 a grade of 0 on the relevant assignment, failure of the entire course, suspension, or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory. Every student should read and fully understand the information given at http://www.umbc.edu/integrity

In particular, for this course:

- Cheating will not be tolerated on the exams, assignments, or quizzes. Cheating includes gaining specific information about the exam before taking it (e.g. in the case of a make-up exam), as well as consulting unauthorized materials during the exam, giving and/or receiving help from other students on quizzes.
- Plagiarism: misrepresenting as your own work any part of the work performed by another person, including Internet sources. Knowingly representing the words or ideas of another as one's own in any academic exercise, including works of art, source code and computer generated information/images.
- Academic dishonesty also includes interfering with another student's work or aiding another student to commit academic dishonesty.

Tentative Schedule (subject to change)

Tentative Schedule of topics (See Google Doc)

Below is a tentative list of topics and dates when they will be covered. The schedule is subject to change. It is the student's responsibility to check the schedule often and make sure they are aware of due dates etc.

The schedule can be found here:

 $\bullet \ \texttt{https://docs.google.com/spreadsheets/d/198ug0s8j1y_aCai1QQKAYuPOBMhnWqI_EFXOnEPqq14/edit?usp=sharing the advantage of the advantage o$

Topics we will cover are:

Java Foundation, Java FX Basics , Java FX Events , Java FX Controls , Android Interface , Android User Inputs, Android Icons and Decision Controls , Android Lists, Arrays, Browsers, Android Audio Controls, Pictures in Gridviews