Course Syllabus for MIS 302
Introduction to Programming for Business Applications
Spring 2018
Sections 001 & 002

Professor: Xin Li, Ph.D. (go by Lucie)
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Office Hours: M 11am-1pm; W 4:30-7:00pm; T/Th 10:30am-noon (or by appointment).

Course Site: Copies of the syllabus, tentative schedule, assignment instructions, project guidelines, exam reviews and PowerPoint slides as well as course related announcements will be available on http://mymason.gmu.edu. Students are responsible to check the course site regularly.

Course Description:
This course covers design and implementation of computer programs (Java) to solve business problems using structured and object-oriented programming techniques. Students become familiar with program development life cycle using Java supported by a modern development environment. Students complete assignments involving problem solving and development of business application.

Learning Objectives:
After completing this course, students should be able to:
- create, compile, and execute java programs;
- understand fundamental programming concepts and develop basic programming skills;
- formulate programmatic solutions for real problems;
- write programs using loops, methods, and arrays, and begin to learn object-oriented programming using classes and methods.

The objective of this course is not to make you epic coders, but more to give you an understanding of these essential concepts; to see how the other half lives. This will give you an understanding of the fundamentals of computing, software and application design, the logic and process in problem solving, and the skillset of programming. Ultimately, this knowledge and experience will give you a richer perspective, project and skills to include in your professional portfolio, and help you be a more effective technology manager.

Heads-up: This course is going to be hard and will require a lot of work both in and out of class. If you have never programmed before, this will require you to adjust the way you look at things as well as approach problem solving in a new way. I have high expectations of all of you. We have a short amount of time to cover a lot of material. I have no doubt that every one of you can and will succeed. You simply need to put in the time to absorb, execute, and practice the concepts in this course.
Important note: The single best way to learn a programming language (or any language, for that matter) is to practice it. As the saying goes, “learn how to break it.” That offers the opportunity to learn how to fix it. There will be little stopping you from appropriating someone else’s code as your own. You will only be robbing yourself, plus it will make the exam difficult, if not impossible, to pass. Please see the “Honor Code” section for additional consequences.

Course Materials:


Technology:

1. Java SE Development Kit (JDK) 9 is required for developing java programs and it can be downloaded at: http://www.oracle.com/technetwork/java/javase/downloads/jdk9-downloads-3848520.html.
2. You will also need java development tools and jGRASP is the recommended development environment. It is lightweight, easy-to-use, and implemented in Java. It is free and can be found at: http://spider.eng.auburn.edu/user-cgi/grasp/grasp.pl?;dl=download_jgrasp.html

Course Deliverables and Grading:

<table>
<thead>
<tr>
<th>Grading Items</th>
<th>Expectations (More detailed descriptions are provided below)</th>
<th>Pts</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Attendance and Exercises</td>
<td>Students are expected to attend every class meeting and actively participate in the in-class exercises and practices. Certain in-class exercises will be required to submit to the Blackboard in every class in order to assess both class attendance and efforts.</td>
<td>200</td>
<td>20%</td>
</tr>
<tr>
<td>Homework Assignments</td>
<td>Ten (10) homework assignments will be given during the semester. They will consist of problem sets designed to offer you practice opportunities and enhance your understanding of the concepts covered in class. All homework are individual work.</td>
<td>300</td>
<td>30%</td>
</tr>
<tr>
<td>Exams</td>
<td>Two (2) exams will be arranged during the semester. They are closed-book, closed-note, timed exams that are not accumulated.</td>
<td>250</td>
<td>25%</td>
</tr>
<tr>
<td>Problem Solving Project</td>
<td>Working in a team, identify a small problem in your life, in the university, in a business, etc.; Design the process to solve it; Write the pseudocode to plan your solution; and finally program it with Java.</td>
<td>250</td>
<td>25%</td>
</tr>
</tbody>
</table>

Grading for the course will be based on total points earned by the end of the course. Final course letter grade assignments will approximate the table below:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>97% - 100%</td>
</tr>
<tr>
<td>A</td>
<td>93% - 96.99%</td>
</tr>
<tr>
<td>A-</td>
<td>90% - 92.99%</td>
</tr>
<tr>
<td>B+</td>
<td>87% - 89.99%</td>
</tr>
<tr>
<td>B</td>
<td>83% - 86.99%</td>
</tr>
<tr>
<td>B-</td>
<td>80% - 82.99%</td>
</tr>
<tr>
<td>C+</td>
<td>77% - 79.99%</td>
</tr>
<tr>
<td>C</td>
<td>73% - 76.99%</td>
</tr>
<tr>
<td>C-</td>
<td>70% - 72.99%</td>
</tr>
<tr>
<td>D</td>
<td>60% - 69.99%</td>
</tr>
<tr>
<td>F</td>
<td>below 60%</td>
</tr>
</tbody>
</table>

Class Attendance and Exercises
Class attendance is necessary to achieve the maximum benefit from this class. Attendance requires that students arrive on time and stay for the entire class. During the class, students should actively participate into the class activities, including lectures, discussions, and in-class exercises, etc. In
School of Business

every class meeting, students will be required to submit selected exercises to the Blackboard. The submissions will be used to assess students’ class attendance and efforts.

If a student is unable to attend a class for any reason, they should notify the instructor as soon as possible by email. The student should also contact me to review what was discussed in class, and what is due before the next class.

Homework Assignments
There will be about ten (10) homework assignments. If I assign more than 10 HWs, the top 10 scores from all the HW assignments will be used into your final course grade.

Points for non-programming questions will be clearly listed on each assignment. Points for any programming questions on assignments will be distributed in the following manner:

- 0% if the code does not compile
- 50% if the code compiles but does not do what it is supposed to and/or is not designed according to the specifications laid out in the assignment document.
- 75% if the code compiles and is designed in an attempt to execute to the specifications laid out in the assignment document.
- 100% if the code compiles, does what it is supposed to, and is designed according to the specifications laid out in the assignment document.

Group Project
In this course, there will be a problem-solving project. The project will be conducted in teams over the course of the semester. The project consists of multiple milestones and deliverables. Team members are expected to work together and make equal contributions into every milestone. The missing or free-riding member of certain milestone will not receive the milestone grade, and will be penalized in the overall project peer evaluation grade as well.

The details of project and milestones will be provided later in the semester.

Timeliness
All in-class exercises should be submitted during the class time. No late submission will be accepted, and no makeup will be provided.
Homework assignments and project deliverables must be submitted on time to receive full credit. Late work will be accepted with 20% grade penalty per day. After the 5th day, your submission will receive no grade.
If you have obligations that conflict with exam or assignment due dates, you should make arrangements with me beforehand.

Missed Exam
Make-up exam will be given only for documented health or academic reasons. If you expect to miss an exam or to be unable to meet another requirement, please discuss this with me before the scheduled dates.

Score/Grade Appeals
Students wishing to appeal a grade or score must submit the appeal to the professor in writing (emails) within one week after receiving the graded work. Score changes are at the discretion of the professor. It is important to understand that your score may go up or down based upon a complete review of the work in question.
**Other Class Policies**

**Communication**

Other than the class meeting times, you may contact the instructor via email or phone. You may also stop by during office hours or schedule an alternate time to meet. Student emails to professors should be sent via your Masonlive email accounts. For the sake of student privacy, I cannot discuss grade and course status with you when you use your personal email addresses such as gmail, yahoo, etc.

Every email sent to the instructor should be respectful, concise and grammatically correct. The subject line should be descriptive and must contain the course and section number (i.e. MIS302-001). The body of the email should clearly state the question. Make sure you include the prior email conversation in the follow-up emails on the same issue. Emails not meeting these standards may cause a delay of my response.

During the school week I normally answer all email questions within 24 hours - often much more quickly. If you have waited 24 hours for a reply, please feel free to re-send or contact me in another way to be sure I received the original request. During the weekends you should allow 48 hours for a response.

**Social Media and Web Policy**

Working on non-course-related assignments, using Facebook/Twitter, checking email, surfing the web, playing games, or other similar activities should be done outside of class. While students may take notes using their personal electronic devices during class, I will work under the implicit agreement that you are paying attention and not participating in the aforementioned activities.

It is an extremely high priority of mine that the classroom experience be one that promotes a learning environment for all students present. Students, their families, and many other university stakeholders have spent their money, time, and resources to make this classroom environment available to you. There are a variety of behaviors that are violations of classroom etiquette because they interfere with the learning environment by (1) distracting other students, (2) distracting the professor, and (3) distracting the student exhibiting the behavior thereby reducing that student's contribution to the class. Some of these behaviors are listed above, but some are worth mentioning again:

1. Using your personal electronic devices for anything other than class business
2. Talking during inappropriate times
3. Showing up late for class or leaving in the middle of class
4. Doing homework for another class during the normally scheduled class time

These having been said, if you do choose to not engage during class, you will still be held responsible for the material covered.

**Learning Disabilities**

If you are a student with a disability and you need an academic accommodation, please contact the Office of Disability Services at 993-2474 or http://ds.gmu.edu. You must arrange all accommodations through the ODS preferably during the first two weeks of the semester.

**Academic Integrity**

It is expected that students adhere to the George Mason University Honor Code as it relates to integrity regarding coursework and grades. The Honor Code reads as follows:

“To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with
the desire for greater academic and personal achievement, we, the student members of the University Community have set forth this: Student members of the George Mason University community pledge not to cheat, plagiarize, steal and/or lie in matters related to academic work.”

More information about the Honor Code, including definitions of cheating, lying, and plagiarism, can be found at the Office of Academic Integrity website at http://oai.gmu.edu/mason-honor-code/.

Specifically for this course, honesty is expected of all students and so work submitted by students as their own will be taken by me and graded as such. Materials taken from any other source shall be clearly identified/cited. Acts of cheating, plagiarism or other violations of academic honesty are not acceptable. Penalty for any violations of the honor code include receiving 0 point on the activity (for all individuals involved) and/or receiving an “F” grade on the course. Please note that all professors at GMU are required to report any Honor Code violations in writing to the Office of Academic Integrity.

Furthermore, I expect that students will carry their weight on all homework assignments and the group project. It is unreasonable and unethical to expect your teammate(s) to make up for your poor work ethic and general lack of team spirit. If teams have a free loader on their teams, please notify me as soon as possible. If any team member chose not to do your fair share, I will not assign you the same grade as your other team members.

**Diversity**

George Mason University promotes a living and learning environment for outstanding growth and productivity among its students, faculty and staff. Through its curriculum, programs, policies, procedures, services and resources, Mason strives to maintain a quality environment for work, study and personal growth. An emphasis upon diversity and inclusion throughout the campus community is essential to achieve these goals. Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, and sexual orientation. Diversity also entails different viewpoints, philosophies, and perspectives. Attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected.

**Student Privacy and More**

Student privacy is governed by the Family Educational Rights and Privacy Act (FERPA) and is an essential aspect of any course. Students must use their MasonLive email account to receive important University information, including communications related to this class. I will not respond to messages sent from or send messages to a non-Mason email address.

However, as a faculty member and designated “Responsible Employee,” I am required to report all disclosures of sexual assault, interpersonal violence, and stalking to Mason’s Title IX Coordinator per university policy 1412. If you wish to speak with someone confidentially, please contact the Student Support and Advocacy Center (703-380-1434), Counseling and Psychological Services (703-993-2380), Student Health Services, or Mason’s Title IX Coordinator (703-993-8730; cde@gmu.edu).