Fundamentals of Computer Science CSCI 135 Syllabus Spring 2016

CSCI 135 Section 00
Instructor: Michael Cassens
Office: SS 411
Office Hours: MWRF 10:00-11:00 am or by appt
Phone: (415) 787-0577
E-mail: michael.cassens@mso.umt.edu
Skype: michaelcassens
Google+: michaelcassens@gmail.com

URL: http://umonline.umt.edu/

Overview:

This class is designed to give you a good general understanding of software development and logical reasoning. This course focuses on introducing general programming and object oriented programming concepts using the Java programming language. This course will introduce all of these concepts as well as provide a number of hands on opportunities to become proficient in using these tools.

- General Computing Concepts
- Object Oriented Concepts
- Logical Reasoning and Critical Thinking
- Java Programming Constructs

Upon completing this course, a student will be able to:

- Understand the basic components of a computer and how it works
- Declare and understand the difference between primitives and object data types
- Create UML diagrams based on requirement descriptions
- Instantiate and use classes from the built-in Java library as well as custom classes
- Create graphical programs using appropriate layout managers and event handlers
- Implement appropriate looping and control structures to solve problems
- Implement and understand method overloading and method overriding
- Create test cases for programs written
- Read from files, iterate through the file and manipulate the data within the file

Attendance:

Attendance is mandatory however I realize there are times when you must be absent. Please give me advance notice of any absences, and I will provide you with the same courtesy.

Class consists of Monday/Wednesday 9 am – 10 am in FOR 106. The lab is from 9-10 am on Friday in LA 206 and 9-10 am Thursday in FA 210. You are also welcome to attend the 136's lab from 2-3 pm on Thursday in LA 206 or 11-12 pm Thursday in LA 206. We will doing pair programming in lab, so you will want to attend one of the lab sessions with a partner.

Grading:

Homework 35%
Labs 20%
2 Exams 15% for each test
Final Exam 15% **Final: May 11th, 2016 10-12 pm**

All Assignments will be submitted through Moodle assignments. If you have trouble with your submission, please send them to

michael.cassens@mso.umt.edu

Your subject must be CSCI 135 Assignment # (e.g CSCI 135 Assignment 1)

If you have multiple files, please zip all your files and label your file: "CSCI135LastNameAssignment1.zip"

Grading Scale

100-90 A, A-	79-70 C+, C, C-	59-and beyond F
89-80 B+, B, B-	69-60 D+, D, D-	

P/NP – pass/no pass, 70 or greater is passing determined by Computer Science Department policy, which is a C or better.

Late Assignments:

- Late assignments will not be accepted. Sorry for the inconvenience.

Requirements

- Required Texts**:**
  - **Java Software Solutions 8th edition – Lewis and Loftus**

- Pre-requisites for this course: CSCI 100
- Required Software:
  - **Java JDK**
    - **http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html**
  - **Eclipse**
    - **http://www.eclipse.org/downloads/**
    - **Get the IDE for Java Developers (should be on top)**

Suggestions:

- It would be beneficial to read and ask as many questions as you can.
- Feel free to set up an appointment if you need help. I am here to help you understand and do well.

Collaboration:

- I encourage you all to work together through problems – make sure you comment who you worked with at the top of the page, but copying and plagiarism will not be tolerated. If you are caught cheating, I will give you an F for the course.
- Please refer to the Student Conduct Code in how this will be dealt with: http://life.umt.edu/VPSA/student_conduct.php

Incompletes:

"Incomplete for the course is not an option to be exercised at the discretion of students. In all cases it is given at the discretion of the instructor…." Some guidelines for receiving an incomplete are listed in the catalog which include having **a passing grade up to three weeks before the end of the semester** and being in attendance. "**Negligence and indifference are not acceptable reasons**." Also note that there may be financial aid implications.

Late Drops:

The University's policy on drops after **45** days of instruction is very specific. The Computer Science Department follows this policy rigorously. There are five circumstances under which a late drop might be approved: registration errors, accident or illness, family emergency, change in work schedule, no assessment of performance in class after this deadline. Except in very unusual circumstances, I will only approve late drops if there is documented justification for one of these circumstances.

Disabilities:

This course is accessible to and usable by otherwise qualified students with disabilities. To request reasonable program modifications, please consult with the instructor. Disability Services for Students will assist the instructor and student in the modification process. For more information, visit the Disability Services website at http://life.umt.edu/dss/.

Class Etiquette:

- Be respectful of your fellow classmates.
- Call me anytime if you have a question.
- Profanity and Obscenity will not be tolerated in class or assignments.

Special Dates:

- Jan 25, 2016 Classes Begin
- Feb 15, 2016 Presidents Day – No Class
- Mar 21-24th, 2016 online and will try and find a sub for labs
- April 4-8 Spring Break
- May 9th-13th, 2016 Finals
- **Final: May 11th, 2016 10-12 pm**

Tentative Schedule:

Syllabus Review and Overview of the course
Week 1 Chapter 1 Introduction of Computing Concepts
Week 2 Chapter 1 Introduction Cont. – Logical Reasoning
Week 3 Chapter 2 Data and Expressions
Week 4 Chapter 2 Data and Expressions cont.
Week 5 Chapter 3 Using Classes and Objects, Conditionals
Week 6 Exam 1 – Mar 2nd, 2016
Week 7 Chapters Loops, 1, 2, 3 Graphics
Week 8 Chapter 4 Writing Classes
Week 9 Chapter 4 Writing Classes cont.
Week 10 Chapter 5 Conditionals and Loops
Week 11 Spring Break
Week 12 Exam 2 April 13, 2016
Week 13 Chapter 6 More Conditionals and Loops
Week 14 Chapter 7 Object Oriented Design
Week 15 Chapter 7 Object Oriented Design cont., Chapter 8, Review
Week 16 Final – Friday May 11th, 2016 10-12 pm