CompSci 251: Intermediate Computer Programming

Spring 2016

Instructor - Eric Fritz
Email - `fritz@uwm.edu`
Office Hours - EMS E280 MW 11-11:50pm

Lab Instructor	Email	Labs	Office Hours
Ahmed Shatnawi	`shatnaw3@uwm.edu`	80X, 80X, 80X	EMS E280 XX-XXpm
X X	`X@uwm.edu`	80X, 80X, 80X	EMS E280 XX-XXpm
X X	`X@uwm.edu`	80X, 80X, 80X	EMS E280 XX-XXpm

1 Overview

Problem solving with structured programming techniques and objects using an object-oriented programming language, including control structures, functions, arrays, classes, standard data structures, graphical user interfaces, exceptions, and files.

2 Required Text

Dean & Dean, *Introduction to Programming with Java: A Problem Solving Approach*, Second Edition, McGraw Hill (Higher Education), 2008. ISBN-13: 978-0073376066.

3 Grading

Course letter grades will be assigned using the following scale, unless we decide that this scale is too severe (in which case the scale will be adjusted downward).

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
Minimum Grade	92	90	88	82	80	78	72	70	68	62	60	0

Course percentage grades are broken down into the following categories.

10% Labs
There will be a lab exercise during each lab meeting. The lab exercises are graded on a scale between $[0, 2]$, where 1 is given for attendance and 2 is given for completion. Missed labs may be graded *within a week* and *in person* during your lab instructor's office hours (or their scheduled convenience). The lowest lab score is dropped.

15% Quizzes
There will be a quiz during each lab meeting. Quiz content will be focused on the material from lecture the previous week. Missed quizzes may be made up *within a week* and *in person* during your lab instructor's office hours (or their scheduled convenience). The lowest quiz score is dropped.

35% Assignments
There will be eight programming assignments. Programs must be submitted to the D2L dropbox and are be graded on correctness, clarity, and style. Assignments are assigned and due at the **beginning** of lecture on Monday. Late assignments are not accepted, as the solution to assignments are auto-released to help aid the following assignment. The lowet assignment grade is dropped. Some assignments may include additional (optional) work for extra credit.

40% Exams
You will have one midterm and one cumulative final (with a strong emphasis on the materials covered after the midterm). Exams will take place during regular lecture period. Exam week labs will be replaced by an ad-hoc review given by the lab instructors (you should come prepared with questions, or at the very least a vague sense of wonder).

40%	**3/09 (10-11am)**	Midterm
60%	**5/19 (10-12am)**	Final

4 Cheating & Collaboration

All graded assignments must be your own work (your own words), but you may work with other people as long as you list their names prominently on the first page of the assignment, and/or in a comment at the top of the assignment, for example:

```
// Wendy Lee, Homework #6, CS 251
// I discussed this assignment with Sam White,
// and Pat Long. We looked at each other's design notes,
// but did not exchange the copies.
```

For this course, verbal communication and collaboration using non-code text or hand-written code is permitted, as long as it is properly documented. Documentation must also be made for help from anyone not in the course, such as a tutor, friend, or relative, and for information off the Web.

Automatic copying of assignments (e.g. email, messaging, flash drive copies, printed hard copies, etc) is **strictly** forbidden. At the very least, you must write every word in your assignments. If you are unsure whether something is permitted, please check with an instructor or TA. If you turn in a program which is an electronic copy (or a minor variation of a copy) of other peoples work, then the source and people who give credit to the source will receive zero for the assignment, while those who do not give credit may be given an 'F' grade for the course. Do not send your programs by email to other people!

Whether or not you have permission of the other person, submitting someone else's work as your own is plagiarism, a serious instance of academic misconduct. Everyone is responsible for learning the material themselves. Some of the assignments may be graded in person, especially in cases where the individual contribution to the assignment is not clear. If you are graded in person, you will be expected to demonstrate that you have mastered techniques used in the material you submitted.

5 Academic Misconduct

The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. A more detailed description of Student Academic Disciplinary Procedures may be found at `http://www4.uwm.edu/acad_aff/policy/academicmisconduct.cfm`.

6 Participation by Students with Disabilities

If, due to a disability, you need special accommodations in order to meet any of the requirements of this course, you should contact your instructor as soon as possible.

7 Religious Observances

Students will be allowed to complete examinations or other requirements that are missed because of a religious observance, provided that the student notifies the instructor of the religious observance during the first three weeks of the semester. For complete details of UWM's policy on religious observances, see `https://www4.uwm.edu/secu/docs/other/S1.5.htm`.

8 Outline

M	W	Topics	Assigned	Due (M 10am)	Reading
1/25	1/27	Course Intro and (Control Structures)			Ch. 1 - 4
2/01	2/03	Review (Strings and Arrays)			Ch. 5, 9
2/08	2/10	Object-Oriented Programming			Ch. 6
2/15	2/17	Object-Oriented Programming	A1		Ch. 7
2/22	2/24	Inheritance and Polymorphism	A2	A1	Ch. 13, 14
2/29	3/02	Aggregation and Composition	A3	A2	Ch. 13, 14
3/07	3/09	Review, Midterm Exam		A3	Ch. 14
		Spring Break			
3/21	3/23	Collections - Generics, Lists			Ch. 10
3/28	3/30	Collections - Sets, Maps, Comparators	A4		Ch. 10
4/04	4/06	Exception Handling			Ch. 15
4/11	4/13	File Input/Output	A5	A4	Ch. 16
4/18	4/20	GUI - Component Layout	A6	A5	Ch. 18
4/25	4/27	GUI - Action Listeners, Timers	A7	A6	Ch. 17
5/02	5/04	⟨ Wiggle Room ⟩	A8	A7	
5/09	5/19	Review, Final Exam (10am-12pm)		A8	