MIS 7397: Object-Oriented Programming Fall 2021 (Tentative)

Professor:R. CooperOffice:OnlineE-mail:rcooper@uh.edu

Office Hours

To be arranged.

Course Focus

This is a beginning programming course that uses Java to help you understand programming concepts, such as an object orientation, routine (method) calls, conditional logic, looping logic, file handling, and effective programming. Therefore, we will not cover many aspects of the Java language that would be important if we were learning Java itself. For example, we will not cover how to create Java applets (that can be used on the Web), how to create and use windows-based forms, graphics, etc.

Required Textbook and Materials

- Farrell, Joyce Java Programming, 9th Edition, Course Technology, Inc., 2019, ISBN-13: 978-1337397070 (hard copy) or 978-0357192757 e-book. Some explanations and clarifications associated with portions of the text can be found in the *Book Notes* document within the *Chapter Replacements, Additions, & Book Notes* section of Blackboard. These explanations and clarifications are **VERY IMPORTANT**. For example, these notes indicate sections and concepts for which you will <u>NOT</u> be held accountable (i.e., they won't be on any quiz or exam). You should print off the *Book Notes* and make changes to your text as soon as you can.
- Student Files that accompany this text can be found in the Student Textbook Files folder within the Lectures & Student Files section in Blackboard.
- In the last weeks of the course we will be covering Sequential File Handling, Database, and Modularization concepts that are not included in the text and/or go beyond that included in the text. Information that you will need can be found in the *Sequential Files, Database*, and the *Modularization* folders that are in the *Chapter Replacements, Additions, & Book Notes* section in Blackboard.

Computer Hardware and Software

- PCs with the appropriate software are available in the Bauer Division of Technology labs. If you plan to work with your own computer, you should Java and NetBeans from the web. Instructions for installing these software packages are contained in the document *Installing Software on your Computer Netbeans* that can be found within the *General Course Information* section of Blackboard. Instructions for using NetBeans is in the document *Using NetBeans* that can be found within the *General Course Information* section of Blackboard.
- Java code associated with the text is located in Blackboard; see Student Files, above.
- The most convenient way for you to store your data is on a USB2 compatible flash drive.
- This class is online synchronous. You will therefore need a **good Internet connection**. The following links provide helpful information in that regard: https://uh.edu/infotech/about/planning/off-campus/improve-internet-connection/
 https://uh.edu/online/students/remote-learning/
 https://uh.edu/blackboard/help/

Course Evaluation

- Your current grades are posted in the *Grade Sheet* document in the *Course Syllabus, Grades, Old Quizzes & Exams* section of Blackboard. In order to have your grades posted, you must turn in your *Authorization to Post Grades*, which is in the *Assignments & Extra Credit* section of Blackboard.
- Regular Credit:
 - \circ Exams. There are two exams that make up 60% of your final grade. The exams are weighted equally: Exam 1 = 30% & Exam 2 = 30%.
 - Quizzes. There are two quizzes that make up 40% of your final grade. Your quiz with the highest score has a weight of 25% and your quiz with the lowest score has a weight of 15%.
- Extra Credit
 - Extra credit for class participation will be given in the following manner. At least 20 times (spread throughout the semester), your instructor will pose a question based on the lecture from THE PRIOR CLASS PERIOD. This question will be asked sometime during a class period. You are to write your answer down in the form provided in Blackboard in the *Assignments & Daily Grades* section. You must submit your answer within the specified time limit; **late submissions are not given any credit**. Though you may use your book & notes, the time limit will typically be short and will preclude you from looking the answer up. You are to do your own work without the help of any other individual or technology.
 - Each correct answer is worth ¼ point. Therefore, if you correctly answer 20 questions (i.e., you receive 3 out of 3 for each of 20 questions), you will earn the maximum extra credit of 5 points; if you correctly answer 10 questions, you will earn 2.5 points extra credit; etc. THIS EXTRA CREDIT APPLIES TO YOUR **OVERALL** CLASS GRADE. Thus, for example, if you scored 85 on Quiz 1, 85 on Quiz 2, 85 on Exam 1, and 85 on Exam 2 and correctly answered 20 questions your grade for the class would be an A rather than a B.
 - o If you are not in class and miss a class's Extra Credit question, there is no makeup of that Extra Credit.

1

- In order to receive Extra Credit, your video must be on so the instructor can see and interact with you during the whole class period. If this is a problem, contact your instructor ASAP.
- Median Adjustment: If the class median for an exam or quiz is less than 80, an adjustment will be made to achieve an 80 median. This adjustment does <u>NOT</u> apply to make-up exams or quizzes.
- Make-up exams or quizzes: You may elect to take a make-up for any exams or quizzes. No reason for taking a make-up needs to be provided to your instructor. Merely contact your instructor as soon as you can after the exam or quiz administration to set a make-up date and time. Note, however, the implications of taking a make-up for the median adjustment, described above.
- **Rounding**: Your overall Class Grade (the weighted total of Exams, Quizzes, and Daily Grades) will be rounded up to the nearest whole number when the value in the tenths place is equal to or greater than 0.5.
- Final Grading Scale

<u>Exams</u>

- Exams are cumulative and are based on the text, assignments, and class discussions. Exams will be online and require a functioning webcam.
- To each exam, bring:
 - your student ID card or driver's license (with a picture that looks like you and with the name that appears on the class roll), pencils with good erasers,
 - $\circ \qquad \text{ONE } 8^{\frac{1}{2}} x \ 11 \ \text{sheet of paper with notes on both sides.}$
 - **ONE** $8\frac{1}{2} \times 11$ sheet of paper that is BLANK on both sides.
- A watch: YOU are responsible for keeping track of the time. Electronic devices, such as cell phones, cannot be used as a watch.
- THE SCHEDULED TIME ALLOWED FOR THE EXAMS INCLUDES BUBBLING IN THE ANSWERS. NO ADDITIONAL TIME WILL BE GIVEN. WHEN THE ALLOTTED TIME IS UP, THE EXAMS MUST BE CLOSED. ANSWERS ON THE ANSWER SHEET ARE CONSIDERED FINAL.
- Exams will **NOT** be handed back nor will answers be posted on the web. Within two weeks of Exam 1 scores being posted, you may see your exam by visiting your instructor. You may see your Exam 2 scores by visiting your instructor during the first two weeks of the **next** semester. You may contest your exam grade **ONLY** during these two-week periods; you may not contest your exam grade after that time.

Quizzes

- Quizzes are cumulative and are based on the text, assignments, and class discussions.
- Allowable Code: Many of you are familiar with Java of one sort or another, and will be able to solve quiz and exam problems using concepts and techniques that haven't been introduced by the assigned readings or lectures. However, we are interested in determining the value added by THIS class. Therefore, you will ONLY be given credit for work that employs concepts and techniques that have been introduced during lectures, assignments, or in the assigned text chapters.
- Each quiz will be online. You are required to have a functioning webcam for your computer.
 - Your student ID card or driver's license (with a picture that looks like you and with the name that appears on the class role)
 - Pencils with good erasers
 - **ONE** $8\frac{1}{2} \times 11$ sheet of paper with notes on both sides.
 - **ONE** $8\frac{1}{2} \ge 11$ sheet of paper that is BLANK on both sides.
 - A watch: YOU are responsible for keeping track of the time. Electronic devices, such as cell phones, cannot be used as a watch.
- Quizzes will be handed back and answers will be posted on Blackboard. You may contest your quiz grade by visiting your instructor **ONLY** within two weeks of the quiz answers being posted; you may not contest your quiz grade after that time.

Assignments (Chinese Proverb: I hear, I forget. I see, I forget. I do, I remember)

The best way to learn about a computer language is to actually use it. During this course, you will have assignments for every chapter. They are **not to be turned in and will not be graded**. However, past experience has shown that students who do not **properly** complete the assignments are **not likely to pass this course!** Though the assignments themselves will not be part of any lecture, feel free to raise any questions regarding assignments in class or during office hours. Your assignments and their answers can be found in the *Assignment Questions* and the *Assignment Answers* folders in the *Assignments & Extra Credit* section of Blackboard. Do **NOT** look at the answers until you are sure that you have done everything correctly. **5 MINUTE RULE**: When you get stuck, work on getting "unstuck" for no more than 5 minutes, and then **ASK** someone (your professor or your friend) for help in order to get unstuck. Then continue working on the assignment by yourself (until you get stuck again).

Class Lectures

- Notes, PowerPoint, etc. used during class lectures will often be posted immediately before class on Blackboard. Look for these within the *Lectures* & *Lecture Material* folder in the *Lectures* & *Student Files* section on Blackboard.
- Class lecture examples & exercises may begin with code provided in the text. It is therefore important for you to bring your text to every class meeting.
- To the extent possible, lectures will be recorded and available for student access within a couple days of each lecture. You will find them within the *Lectures & Lecture Material* folder in the *Lectures & Student Files* section on Blackboard.

Class Attendance

Your attendance in class is not mandatory. However, you are responsible for all material covered in class. If you miss a class, it is your responsibility to find out what was covered by asking other students. (Ask more than one student to be sure that you understand everything covered in class.) Recordings of most lectures will be available to you within the *Lectures & Lecture Material* folder in the *Lectures & Student Files* section on Blackboard. If you are not in class and miss a class's Extra Credit question, there is no makeup of that Extra Credit.

Class Announcements Increasing the Likelihood of Getting a Higher Grade

- Announcements, suggestions, etc. will be provided in the Announcements section in Blackboard. Check this at least twice per week.
- This is a relatively hard course. It would be very helpful for you to print off and follow the recommendations contained within the document titled *MIS Programming Survival Guide* within the *General Course Information* section of Blackboard.

Accommodations for Students with Disabilities

We would like to help students with disabilities achieve their highest potential in this class. To this end, in order to receive academic accommodations (e.g., for a quiz or exam), students must register with the Center for Students with Disabilities (CSD) (telephone 713-743-5400), and present approved accommodation documentation to your instructor in a timely manner (e.g., prior to the quiz or exam).

Professional Conduct and Academic Honesty

All students are expected to conform to the Bauer Code of Ethics and Professional Conduct. This code can be found at the following web page: http://www.bauer.uh.edu/business-ethics/bauer-code-of-ethics.php

In addition, the University of Houston Academic Honesty Policy is strictly enforced by the C. T. Bauer College of Business. No violations of this policy will be tolerated in this course. A discussion of the policy is included in the University of Houston Graduate Catalog at the following web page <u>http://publications.uh.edu/content.php?catoid=37&navoid=13621</u>

Students are expected to be familiar with the Bauer Code and the University of Houston Academic Honesty Policy.

	D (Tentative Class Schedu		
Г	Date August 24	• Introduction to Class & Creating a Program	Java Text* Chapter 1	Assig
	August 24	 Introduction to Class & Creating a Program Using Data 	Chapter 2	
-	31	Using Data Using Methods	Chapter 3	- C
	51	Using Classes	Chapter 5	S
-	September 7	Class Features & Methods	Chapter 4	e
-	14			
	14	Input & Decision Making Special Operators	Chapter 5	e
-	21	Special Operators	Onin mill consist of multing as do similar	-
	21	• Quiz 1	Quiz will consist of writing code, similar to the old quizzes kept on Blackboard. It	Α
			will be online using a WEBCAM.	
		Looping	Chapter 6	S
-	28	Looping	Chapter 7	S
-	28 October 5	• Strings	· ·	i
-		Arrays	Chapter 8	
	12	• Exam 1	Exam will be similar to the sample exam kept on Blackboard. It will be online using a WEBCAM.	g n
		Advanced Arrays	Chapter 9	m
-	19	Inheritance	Chapter10	e
ľ	26	• Inheritance (Continued)		
-	November 2	Advanced Inheritance	Chapter 11	n
	9	Quiz 2 Exception Handling	Quiz will consist of writing code, similar to the old quizzes kept on Blackboard. It will be online using a WEBCAM. Chapter 12	t s
-	16	• Files	Chapter 13 Replacement (in Blackboard) Read through p. 548	F
Ī	23	• Flowcharts	See Sequential Files folder in Blackboard	0
		Sequential File Processing		1
-	30	Database Processing	See SQL Information folder in Student Files within Blackboard	d
		Modularization	See Modularization folder in Blackboard	e
te the ite & 'ime	Tuesday, December 14 ← 6:00pm -	• Exam 2	Exam will be similar to the Sample Exam kept on Blackboard. It will be online using a WEBCAM.	r
-	9:00pm			

*If the end page for Read or YDI has part of an old and the beginning of a new topic, stop at the end of the old topic.