Object Oriented Design & Programming I
Computer Science 221

Instructor:	Erik Krohn
E-mail:	krohne@uwosh.edu
Text Message:	608-492-1106
Class Time:	Monday & Wednesday: 10:20am - 11:20am
Classroom:	Halsey 309
Lab Time:	Friday: 10:20am - 11:20am
Lab Location:	Swart 229A
Office Location:	Halsey 216
Office Hours:	Monday: 11:20am - 12:20pm
	Wednesday: 12:00pm - 1:00pm
	Thursday: 12:20pm - 1:20pm
	Friday: 12:50pm - 1:50pm
Prerequisites:	A grade of C or better in Math 104 or Math 108 or Math 206 or Computer Science 142, or qualifying for Math 171 via the Mathematics Placement Exam.
Course Website:	`https://www.uwosh.edu/canvas`
Recommended Textbook:	Introduction to Programming with Java, a Problem Solving Approach by Dean & Dean, ISBN 9780073047027

Course Information
A first course in problem solving, software design, and computer programming using an object-oriented language. Problem solving/software design techniques include: flow charts, pseudo code, structure charts, and UML class diagrams. Data structures and algorithms include: arrays, characters strings, linear search. Programming topics include; data types assignment statements, standard input/output, selection, repetition, functions/methods, parameters, scope of identifiers, debugging.

Hybrid Potential
This course may be held in a hybrid mode in the three weeks following spring break. More information will be shared in the coming weeks.

Course Website
You should check the course website on a regular basis - it will contain lecture notes, handouts, assignments, announcements, and grades. I'll do my best to let you know when something new and important comes up, but it is your responsibility to check the web site frequently for information that you might not get otherwise.

Mini Assignments
For each lecture, you will have a mini assignment for that lecture. Mini assignments are generally short and should take less than fifteen minutes to complete. You will be assigned a mini assignment every lecture to ensure you are staying current with the material. I will

drop your 2 lowest mini assignments. Not all mini assignments will be graded. Solutions to the mini assignments will be given on the day they are due. Because of this, **no late mini assignments will be accepted.**

Projects & Labs

Most projects and labs will consist of short programming projects. One of your goals (during this class and beyond, in Java or any programming language) should be to write understandable, readable code. You should be making every effort to comment anything that might be confusing to a reader unfamiliar with your program, to name variables intelligently, to use indentation that reflects the code's organization, and so on. All of this will be taken into account during grading: poorly organized or written code may have a negative impact on your grade, even if the resulting program works fine.

One of the goals of this class is to teach you to write functioning programs in Java - thus, your code must compile in order for you to receive any credit. Code that does not compile will not be tested and your score will be a 0. Keep this in mind when writing programs: write your code in small pieces, making sure each piece works before moving on to the next one. It is much better to turn in a project that is not finished but has many working pieces than to turn in one that doesn't work at all, even though most of the code is written.

All assignments must be submitted electronically to the correct dropbox. It is your responsibility to ensure that your submission was submitted correctly. You must double check to ensure your program was uploaded correctly. **See late policy on canvas for late submissions**.

Exams

Exam material will come from the lecture notes, mini assignments, labs, book and assignments. There will be more information about each exam as it approaches. The *tentative* exam dates are listed below. All exams will be taken during the regular class period. These may change, so as the date approaches make sure you've got the most recent information.

- **Exam One** - Wednesday, March 1st, 2023

- **Exam Two** - Wednesday, April 5th, 2023

- **Exam Three** - Wednesday, May 10th, 2023

If you are unable to take a scheduled exam, it may be possible to take a make-up exam provided that you do both of the following, which are then subject to my approval:

1. Make arrangements prior to the scheduled exam. For last minute emergencies, telephone me at 920-424-2063 or leave a message at the computer science office, 920-424-2068 or send me a text message. No after-the-fact notifications will be accepted.

2. Have a written medical excuse signed by the attending physician OR have a note of justification from the Dean of Students Office.

If allowed, only one make-up exam will be given. It will be a comprehensive exam given at an arranged time during the last week of the semester.

Grading

Course grades will be based on assignments/projects, mini assignments, labs and exams. Your final grade will be computed with the following percentages:

- 40% - assignments/projects

- 15% - mini assignments & labs

- 45% - exams

If you believe anything was graded incorrectly or unfairly and would like to have it regraded, you must let me know about it within *one week* of having the item graded. I will regrade the entire assignment or exam and you may gain or lose points.

Grading will be on a plus/minus system. Grading may be done on a curve depending on the overall performance of the class. If no curve is used, your grade will be computed based on the following:

Percentage	Grade	Percentage	Grade
≥ 92	A	72 - 78	C
90 - 92	A-	70 - 72	C-
88 - 90	B+	68 - 70	D+
82 - 88	B	62 - 68	D
80 - 82	B-	60 - 62	D-
78 - 80	C+	< 60	F

Textbook

The textbook is a recommended textbook. If you understand everything that is going on with the program on this page: https://faculty.cs.uwosh.edu/faculty/krohn/CS221Pretest.java, then you do not need the book. If you did not understand most of it, then you should get the book.

Learning Outcomes

1. Choose appropriate existing data types to represent data.

2. Control sequential program execution with selection and iteration constructs.

3. Manipulate collections of data using arrays.

4. Create and use methods to organize and re-use code.

5. Create and use new classes to model new data types.

6. Reason about algorithms to solve problems and convert an algorithm into programming language instructions.

Other Information

1. Attendance is not taken in this course. However, you are unlikely to do well if you miss lecture and/or lab.

2. **Academic dishonesty** of any kind will not be tolerated. All assignments, labs, mini assignments and exams are to be completed individually. While discussion of ideas and problems with fellow students is encouraged, all projects and labs must be done individually. In certain circumstances, code fragments from the instructor may be provided to eliminate tedious coding or to provide a common framework for all students. **All other code must be original**. Online resources may be used to help you understand the material, but you may not copy online code nor can you "borrow" code from other students, past or present.

   Any suspected academic dishonesty will be dealt with on a case-by-case basis. Any clarification of what does or does not constitute academic dishonesty must take place **before** you turn in questionable work. For clarification on what constitutes academic dishonesty, contact me or consult the printed policy in the UWO Student Discipline Code, Chapter UWS 14.

3. If you are in need of accommodations for this course, please see the Dean of Students for assistance: https://www.uwosh.edu/deanofstudents/Accessibility-Center/student-resources

4. Students are advised to see the following URL for disclosures about essential consumer protection items required by the Students Right to Know Act of 1990: https://uwosh.edu/financialaid/consumer-information/.

5. If any substantive changes are made in the course syllabus, such as changes in schedule or assignments, notification will be provided in a timely manner and a revised syllabus will be made available.