San José State University
Computer Science Department
CS151, Object Oriented Design and Programming, 05, Fall 2022

Course and Contact Information

Instructor(s): Yulia Newton, Ph.D.
Office Location: DH282
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Office Hours: Tue/Thur 6:15 – 7:15pm (via zoom). Also by appointment via zoom upon request. I am available to do one-on-one or group meetings.
Class Days/Time: Mon/Wed 6:00 - 7:15 PM/
Classroom: Sciences Building 258
Prerequisites: MATH 42 (Discrete Mathematics), CS 46B (Introduction to Data Structures), and CS 49J (Programming in Java) or equivalent knowledge of Java (with a grade of "C-" or better in each of the classes)

COVID-19 safety measures for in-person courses

Course Description

Design of classes and interfaces. Value and reference semantics. Object-oriented design methodologies and notations. Design patterns. Reflection and serialization. Exception handling. Graphical user interface programming. Frameworks and components. Multithreading. Required team-based programming assignment. Prerequisite: MATH 42, CS 46B, and CS 49J (or equivalent knowledge of Java) (with a grade of "C-" or better in each); Computer Science, Applied and Computational Math or Software Engineering majors only; or instructor consent.

Course Format: technology intensive, in-person

Faculty Web Page and MYSJSU Messaging

We will use Canvas for most class related materials. Any specific/personal questions (grade related or personal situations) must be communicated via email or canvas message.

Points will be deducted for incomplete question responses and solutions that are partially functional. Consult individual assignment for details of point allocation for each problem.

Extra credit:
Extra credit options might be available in this class. All and any possible extra credit options will be announced in class and posted in canvas system if and when they become available.

Homework assignment due date:
Submission is allowed till 11:59 pm on due date.

Late assignments:
10% of the assignment grade will be subtracted for each 1 week of late submission. Even one day late will count as the whole 1 week late. 8 days late submission will count as 2 weeks late, and so on.

Makeup Exams:
You must submit only your own work on exams. Makeup exams will only be given in cases of illness (documented by a doctor) or in cases of documentable, extreme emergency.

Grading scale:

Note that "All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades." See University Policy F13-1 at http://www.sjsu.edu/senate/docs/F13-1.pdf for more details.

Classroom Protocol (aka how to succeed in this class)

1. Attend all sessions. From past semesters, data shows that there is a positive correlation between attendance and your overall grade.
2. Come to class on time. Students entering the classroom late disrupt the lecture and / or the students

5.

CS151 / Object Oriented Design and Programming, Fall 2022

Course Schedule

Course Schedule (subject to change)

Week	Date	Topics, Readings, Assignments, Deadlines	Additional Notes
1	8/22/2022	Intro to CS151, logistics (schedule in this syllubus is tentative and is subject to change)	Attendance quiz due on 8/24/22
2	8/24/2022	JVM vs. JRE vs. JDK; Javadoc comments and annotations	
2	8/29/2022	OOP: Classes and interfaces	Quiz#1 due on 8/28/22 Quiz#2 due on 8/28/22
3	8/31/2022	OOP: Classes and interfaces	
3	9/5/2022	Labor day - no instructions	
4	9/7/2022	OOP: Classes and interfaces	
4	9/12/2022	OOP: Classes and interfaces	HW01 assigned
5	9/14/2022	Introduction to UML	Quiz#3 due on 9/18/22
5	9/19/2022	Principles of OOD	HW01 due HW02 assigned
6	9/21/2022	Principles of OOD	
6	9/26/2022	Java exception handling	Quiz#4 due on 9/25/22 HW03 assigned
7	9/28/2022	Object copy, equality, compare	HW02 due
7	10/3/2022	Java collections	Quiz#5 due on 10/2/22 Quiz#6 due on 10/2/22
8	10/5/2022	Java collections	HW03 due

Week	Date	Topics, Readings, Assignments, Deadlines	Additional Notes
8	10/10/2022	Java collections	HW04 assigned
9	10/12/2022	Design patterns	
9	10/17/2022	Design patterns	Quiz#7 due on 10/16/22
10	10/19/2022	Midterm online (no class meeting)	
10	10/24/2022	Design patterns	HW04 due
11	10/26/2022	Desing patterns; Multithreading and concurrent programming	
11	10/31/2022	Multithreading and concurrent programming; Java generics	HW05 assigned
12	11/2/2022	Java generics; GUI programming	HW06 assigned
12	11/7/2022	GUI programming	Quiz#8 due on 11/6/22 Quiz#9 due on 11/6/22 HW05 due
13	11/9/2022	GUI programming	HW06 due
13	11/14/2022	GUI programming	HW07 assigned
14	11/16/2022	GUI programming	
14	11/21/2022	Java reflection	Quiz#10 due on 11/22/22
15	11/23/2022	Thanksgiving - no instructions	
15	11/28/2022	Java reflection	HW07 due HW08 assigned
16	11/30/2022	IO programming	Quiz#11 due on 11/29/22 HW09 assigned

Week	Date	Topics, Readings, Assignments, Deadlines	Additional Notes
16	12/5/2022	Serialization	Quiz#12 due on 12/5/22 HW08 due HW09 due on 12/11/22
Final	12/12/2022	Final exam online (no in-person meeting)	Online to take any time during that day All late work must be submitted by 12/13/22