Greensheet

CS 151: Object-Oriented Design | **San José State University**

Spring 2021, Sections 05, and 06 | **Department of Computer Science**

Instructor Info

Instructor	**Ahmad Yazdankhah**	My name is difficult to pronounce!
Office Location	Online	Physically it is MH 411 but we won't use it at all.
Email	ahmad.yazdankhah@sjsu.edu	Please email via Canvas
Website *	Under construction!	Our official educational web tool is Canvas available at https://sjsu.instructure.com/
Phone		Email is the best way to communicate with me!
Office Hours	MW 5:45 pm – 7:00 pm	By appointment please!

* Course materials such as handouts, notes, assignment instructions, etc. can be found on *Canvas Learning Management System* available at http://sjsu.instructure.com. You are responsible for regularly checking with its messaging system (or other communication system as indicated by the instructor) to learn of any updates.

Class Info

	Section 05	**Section 06**
Meeting Time	TR 3:00pm – 4:15pm	TR 4:30pm – 5:45pm
Classroom	Online - Zoom	Online – Zoom
Course Type	Hybrid	Hybrid

General Events of Semester

Description	**Day of Week**	**Month**	**Day #**	**Comment**
First day of instruction	Wednesday	January	27	Thursday, January 28 for TR classes
Last day to drop	Monday	February	08	
Last day to add	Monday	February	15	
Spring Recess	Mon – Wed Thurs - Fri	March April	29 – 31 01 – 02	
Daylight saving time	Sunday	April	14	
Last day of instruction	Monday	May	17	Thursday, May 13 for TR classes
Final Examinations	Wed-Fri, Mod-Tue	May	19 – 21 24 – 25	Please look at the syllabi at page 5 for the final exam info.
Grades due from faculty	Friday	May	28	End of semester
Grades Viewable on MySJSU	Saturday	May	29	

For academic events of this semester, please refer to the course syllabus at page 5.

Course Info

Catalog Description

Design of classes and interfaces. Object-oriented design methodologies and notations. Design patterns. Generics and reflection. Exception handling. Concurrent programming. Graphical user interface programming. Software engineering concepts and tools.

Prerequisites

Math 42	Discrete Mathematics	Grade C minus or better
CS 46B	Introduction to Data Structure	Grade C minus or better

The Department of Computer Science strictly enforces prerequisites.

If you are not already pre-enrolled, you must attend the first day of the class and let your instructor know and fill out the provided document. If the class is not full, the permission codes will be provided to the requesters based on the priorities. More information will be given in the first day of the class.

Please note that any student who does not show up during the first two class meetings, may be dropped by the instructor.

Required Text

This course does not need a required textbook. My lecture notes contain all required materials.

Further Readings

1. Cay Horstmann, "Object-Oriented Design & Patterns," 3rd edition:
   A watermarked edition will be provided in the Canvas.
   The resources can be found at: http://horstmann.com/oodp3/
2. Stephen Gilbert and Bill McCarty, "Object-Oriented Design in Java," Sams
   ISBN-13: 978-1571691347
3. The references at the end of each lecture note.

Course Learning Outcomes (CLO)

Upon successful completion of this course, students would be able to:

1. Object-Oriented Design
   - Be able to follow a systematic object-oriented design methodology
   - Develop use cases, perform noun-verb analysis, interpret and produce CRC cards
   - Interpret and produce UML diagrams
   - Deeply understand object-oriented concepts
   - Use several design patterns
   - Practice SOLID design principles
2. Advanced Java Language
   - Be master on implementing Java fundamental concepts of OOP
   - Be familiar with Java structures such as: Interfaces, Abstract classes, Nested classes, ...
   - Implement Java standard object methods
   - Be familiar with Java type system, lambda expression, serialization, and generics
   - Implement exception handling

- Implement threads and thread-safe data structures

3. GUI Programming
    - Use JavaFX to create graphical user interface (GUI) for desktop applications

Examinations and Assignments

- Every Tuesday, there would be a short quiz .
- There would be two midterms, and a final exam.
- There would be a term project and several individual assignments.
- All examinations would cover from the beginning of the semester.
- There won't be any makeup for the exams.

Grading Information

Assignments	10%
Term Project	25%
Quizzes	20%
Midterm #1	10%
Midterm #2	15%
Final	20%
Total	**100%**

Nominal Grading Scale

From	To	Grade
97	100	A plus
93	96.99	A
90	92.99	A minus
87	89.99	B plus
83	86.99	B
80	82.99	B minus
77	79.99	C plus
73	76.99	C
70	**72.99**	**C minus**
67	69.99	D plus
63	66.99	D
60	62.99	D minus
0	59.99	F

To practice time management, late submissions will lose 20% of the total assignment score and an additional 20% for each 24-hour afterward.

Final Grade

- Your final grade might be adjusted depending upon your level and quality of participation in the class activities. Note that "participation" is NOT equal to "attendance".
- If the FINAL grades of the class at the end of the semester is not normal, then I might curve the grades. So, it is not the case that I'd curve all exams and assignments individually.
- More details about final exam can be found in University policy S17-1 available at http://www.sjsu.edu/senate/docs/S17-1.pdf.

Course Requirements and Workload

- Success in this course is based on the expectation that students will spend at least 6 – 10 hours per week for:
    - working on the assignments.

- preparation for the exams (quizzes, midterms, and final).
- working on the term project.

- More details about student workload can be found in University Policy S16-9 available at http://www.sjsu.edu/senate/docs/S16-9.pdf.

Course Format

This course will be taught in a hybrid format. The lectures will be recorded and provided before the lecture time and students should watch it before attending the class. In each lecture meeting, the lecture will be summarized, last week assignment and quiz will be solved, and students' questions will be responded. Students need a laptop equipped with camera and microphone during the lectures and exams.

Online Classroom Protocol

- All microphones will be muted automatically when you join the meeting. If you have a question, you need to unmute it or type your question in the chat room.
- The chat room will be private and instructor reads your questions loudly and answer them.
- We won't use camera during the lectures but will use it during the exams. Therefore, you need to get dressed appropriately. **Dressing code** is "**Business Casual**".
- Attendance is highly recommended, but is not mandatory, except for exam dates.

  NOTE that University policy F69-24 available at http://www.sjsu.edu/senate/docs/F69-24.pdf states that:
  "Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading.
  If a student has been out of school for one or more days, he/she should report to his instructors upon his/her return to inquire about making up the work. Students who know in advance that they will miss one or more classes should inform their instructors about their plans."

Consent for Recording of Class and Public Sharing of Instructor's Material

- Common courtesy and professional behavior dictate that you notify someone when you are recording him/her.
- You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private study purposes only.
- The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.

University Policies

Per University Policy S16-9 available at http://www.sjsu.edu/senate/docs/S16-9.pdf, relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on Syllabus Information web page available at http://www.sjsu.edu/gup/syllabusinfo, which is hosted by the Office of Undergraduate Education. Make sure to visit this page to review and be aware of these university policies and resources.

Course Schedule

Note: This is a tentative schedule and is subject to change but with fair notice.

Day	Date	Lec #	Topics	Exams
1	01/28	0	Greensheet; A big picture of the course	
2	02/02	1	Enter OOP (Part 1)	Quiz 0
3	02/04	2	Enter OOP (Part 2)	
4	02/09	3	Software Development Lifecycle (Part 1)	Quiz 1
5	02/11	4	Software Development Lifecycle (Part 2)	
6	02/16	5	Software Development Lifecycle (Part 3)	Quiz 2
7	02/18	6	Software Development Lifecycle (Part 4)	
8	02/23	7	Java Structures (Part 1); Interfaces	Quiz 3
9	02/25		Review and Study Guide, Q & A	
10	03/02		Exam	Midterm 1
11	03/04	8	Java Structures (Part 2); abstract, anonymous, and nested classes;	
12	03/09	9	Java Structures (Part3); Lambda expressions	Quiz 4
13	03/11	10	Java Structures (Part4); Operations on Java Objects	
14	03/16	11	GUI Programming (Part 1)	Quiz 5
15	03/18	12	GUI Programming (Part 2)	
16	03/23	13	GUI Programming (Part 3)	Quiz 6
17	03/25	14	OOP Fundamentals (Part 1);	
18	03/30		Spring Recess	
19	04/01		Spring Recess	
20	04/06	15	OOP Fundamentals (Part 2)	Quiz 7
21	04/08		Review and Study Guide, Q & A	
22	04/13		Exam	Midterm 2
23	04/15	16	Implementation Guidelines (Part 1); Solution of Exam	
24	04/20	17	Implementation Guidelines (Part 2)	Quiz 8
25	04/22	18	OOD Guidelines (Part 1); SOLID Principles	
26	04/27	19	OOD Guidelines (Part 2); SOLID Principles	Quiz 9
27	04/29	20	OOD Guidelines (Part 3); Design Patterns	
28	05/04	21	Advanced Java (Part 1)	Quiz 10
29	05/06	22	Advanced Java (Part 2)	
30	05/11	23	Advanced Java (Part 3)	
31	05/13	24	Advanced Java (Part 4)	

Final exam	**Section 05 (TR 3:00pm – 4:15pm)**	**Section 06 (TR 4:30pm – 5:45pm)**
Date and Time	Monday, May 24 @ 02:45 pm	Friday, May 21 @ 02:45 pm
Venue	Online	Online