Course	**ITSS 3312.001 Object-Oriented Programming**
Instructor	Zehan Zhao
Term	Spring 2022
Meetings	Tuesday & Thursday, 5:30-6:45 p.m. Room JSOM 2.714 (First three weeks online in MS Teams)

Instructor:	Zehan Zhao
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Office Hours:	Tuesdays 4:00 p.m. to 5:00 p.m. (online) or by appointment;

Prerequisites

Prerequisites: ITSS3311 and (MATH 1326 or MATH 2414 or MATH 2419 or MATH 2419 or OPRE 3340) and (CS 2305 or MATH 2333 or MATH 2418 or OPRE 3333).

Course Description

The primary objective of this course is to introduce students to the fundamental concepts and techniques of object-oriented programming in Java programming language using a popular integrated development environment (IDE). Other advanced topics that are covered during the course are data structures, exception handling, basic I/O techniques, and GUI programming.

Learning Outcomes

1. Students will be introduced to Eclipse that is currently the most popular Integrated Development Environment (IDE) for Java development. Students will be able to effectively use the IDE to create projects, write programs, compile, and run their Java programs.
2. Students will learn the concepts of object-oriented programming: abstraction, encapsulation, inheritance, and polymorphism.
3. Students will develop programming skills to develop object-oriented programs in Java. Students will improve the skills of programming using different programming techniques such as selections, loops, etc., with basic data structures like arrays.
4. Students will then learn and develop more advanced skills such as object-oriented GUI programming with Java.

Textbook Requirement

zyBook:
ITSS 3312: Object-Oriented Programming
zyBook ISBN:
979-8-203-94567-9

Subscribing instructions:

1. Click the zyBooks link on e-learning
2. Subscribe (A subscription is $77)

Important Note: zyBook is the required textbook for this class. It includes the textbook, and the homework assignments for this class. All the assignments including the group project will be submitted online through zyBooks and will be graded automatically.

Supporting Materials

1. Introduction to Java Programming and Data Structures (Comprehensive Version), 12th Edition, by Y. Daniel Liang Pearson Education Inc., publishing as Prentice Hall (ISBN-13: 978-0136520238 or ISBN-10: 0136520235). Or earlier editions of this textbook by Liang
2. Suggested tutorials: http://docs.oracle.com/javase/tutorial
3. Course Slides will be posted on eLearning course site.
4. All the required software applications are currently available in JSOM labs PCs. Students can use these PCs for their class work whenever the labs are open.

Required Software

Java JDK

- For Window OS Users

Java JDK - Java SE 8 Update 301 or later versions of Java SE

Important Note: Many editions, versions, and updates of Java JDK are available for downloads. Students must be sure that the correct version of Java JDK is selected, downloaded, and installed: Edition: Standard Edition (SE), Version: 8, Update: 301 or later version

There are 2 versions depending on your OS (Windows or Mac) and 2 versions depending on your processor (32-bit and 64-bit). You should install the 32-bit version only if your personal computer is a 32-bit machine

Free download of Java JDK – Java SE 8 Update

Link 1: https://www.oracle.com/java/technologies/downloads/#java8

Link 2: https://www.java.com/en/download/

- For MAC OS X Users (x64: 64 bits)

Free download of Java JDK – Java SE 8 Update 301 or later version

Link: https://www.oracle.com/java/technologies/downloads/#java8-mac

Eclipse IDE for Java Developers

Free download of Eclipse IDE for developers

64-bit: https://www.eclipse.org/downloads/packages/
32-bit:https://www.eclipse.org/downloads/packages/release/helios/sr1/eclipse-ide-java-developers

Important Notes: The version of Eclipse IDE must be compatible with the version (32-bit or 64-bit) of the Java JDK. If the 32-bit Java JDK is installed, Eclipse IDE of 32 bits must be used. Students should install the most recent version of Eclipse.

Special Purpose Assessments Guidelines (5% of final grade calculation)

There are 3-4 special-purpose assessments during the semester for which students will earn points. The special purpose assessments will not be graded by scores. Full credits will be received for each assessment if you participate.

1. Pre-Course Survey – Covers student profile information and suggestions for course structure
2. Assessment Quiz 0 – Assesses students' retention and understanding of content from ITSS 3311.
3. Midterm Survey – Provides a forum for feedback to the instructor on students' satisfaction with the course and suggestions for improvements to the course.

Assignments Guidelines (40% of final grade calculation)

There will be five homework assignments throughout the course. Descriptions of assignments and grading criteria will be posted when they are assigned. All the assignments will be submitted online through zyBook and will be graded automatically. The sample solutions to the assignments will be posted on the discussion board on e-learning. The lowest homework grade will be dropped. Students are required to submit their assignments on time.

Late assignments will be accepted but with discounted points. For a full credit assignment, 15% of the credits will be deducted each day a project is late.

Important Notes: Each student is expected to do their own work on the assignments. Working together or in groups, copying another student's work or computer files, or having another person do your work is scholastic dishonesty and will be addressed via the academic dishonesty processes of the University. You are allowed to discuss the assignments but are not allowed to post or ask the entire codes directly.

Group Project Guidelines (15% of final grade calculation)

There will be one group project throughout the course. The group assignment is to be done in a group of a maximum of 3 students. Please sign up into groups using the e-learning group sign-up tool. Groups should be formed during the spring break and no later than March 27th, 2022. Descriptions of the group project and grading criteria are posted during the spring break and will be due in the final week of this course on May 10th, 2022. The group assignment code will be

submitted online through zyBook, while the group assignment report will be sumitted in eLearning. Students in a group should all contribute to the project. Students in a group will receive the same grade for the group project. However, suppose a student did not contribute or contribute very little to the group project. In that case, the instructor will make a grade deduction based on the contribution listed in the report.

Important Notes: If you cannot find a group to join, please email the instructor directly. You will be randomly assigned to a group.

Quiz Guidelines (40% of final grade calculation)

There are four quizzes in this course, each of which is worth 10% of the final grade. The quizzes will be closed book and conducted in class. The goal of the quiz is to test your ability to read, write and assess Java codes. Given the nature of this course, the quiz will be composed of multiple choice and true/false questions. The duration of the quiz will be 30-45 minutes, depending on the number of questions in the quiz.

Make-Up Policy

No make-up quizzes will be offered except for medical reasons. Students will be required to provide necessary documentation.

Important Notes: ~~Please bring a bubble sheet and a 2B/HB pencil to the exam~~.
The quiz will be conducted in class using the LockDown Browser. Please bring your laptop to the quiz. Before you come to the exam, make sure you have downloaded and installed the LockDown Browser on your personal laptop (It must be the UTD version).

LockDown Browser UTD version Link:
https://ets.utdallas.edu/elearning/resources/software/lockdown
LockDown Browser UTD Installation Link:
https://download.respondus.com/lockdown/download.php?ID=353814262

Extra credit for class attendance (5% extra of final grade calculation)

Extra credits are given based on attendance of in-person lectures, starting from Feb 10th. The calculation of extra credit is based on the attendance sheet signed over the total classes. For example, if the total lecture is 10, and a student attends 7 of them offline, the extra credits a student will get are 7/10 = 0.7 * 5%. If the total lecture is ten and a student attend 9 of them offline, the extra credits a student will get are 9/10 = 0.9 * 5%. If students attend all the classes, they will get 5% of the additional credits. If there is an emergency and a student still wishes to get 5% extra credits, prior approval from the instructor is needed.

Grading Policy

This course features a mixture of assignments, group projects, and exams to assess students' performance. The Grade Calculation table below shows points for each scored category/activity. Letter grades will NOT be provided for each assignment or exam. Letter grades will be provided at semester-end based on the Letter Grade Scoring table below or on a curved distribution that conforms to UT Dallas guidelines, whichever is more favorable to the students.
The instructor is available to discuss grades one-on-one at any time during the semester.

Grade Component	Points
Assignments (drop lowest grade)	40%
Group Project	15%
4 Quizzes	40%
Course Surveys + Quiz 0	5%
Extra credit for attendance	5%
Total	105%

The final letter grade will be determined as follows:

Final Point Total	Letter Grade
97-105	**A+**
90-96.99	**A**
86-89.99	**A-**
81-85.99	**B+**
76-80.99	**B**
70-75.99	**B-**
67-69.99	**C+**
64-66.99	**C**
60-63.99	**C-**
57-59.99	**D+**
54-56.99	**D**
50-53.99	**D-**
< 50	**F**

Course Schedules

Below is the initial course schedule. The course schedule is subject to change as the course progresses. Changes to the course schedule will be announced via email and posted in eLearning.

Week	Date	DESCRIPTION	Assignments/Surveys	zyBooks Sections
1	18-Jan	Course Overview Basics of Java, Variables/Assignments	Pre-Course Survey	Ch1, Ch2
	20-Jan	Basics of Java, Variables/Assignments	Pre-Course Survey is due	Ch1, Ch2
2	25-Jan	Branches		Ch3
	27-Jan	Branches	Assessment Quiz 0	Ch3
3	1-Feb	Loops	Assignment 1 assigned	Ch4
	3-Feb	Loops		Ch4
4	8-Feb	Arrays: Single-dimensional		Ch5
	10-Feb	Arrays: Multi-dimensional	Assignment 1 is due	Ch5
5	15-Feb	Quiz 1: Ch3, 4, 5	Assignment 2 assigned	
	17-Feb	Methods		Ch6
6	22-Feb	Methods		Ch6
	24-Feb	Methods, Objects and Classes	Assignment 2 is due	Ch6, Ch7
7	1-Mar	Objects and Classes		Ch7
	3-Mar	Objects and Classes	Mid-term Survey	Ch7
8	8-Mar	Quiz 2: Ch6, 7	Assignment 3	
	10-Mar	Objects and Classes	Mid-term Survey due	Ch7
9	14-20 Mar	Spring Break	Group project is assigned	
	20-Mar			

Week	Date	DESCRIPTION	Assignments/Surveys	zyBooks Sections
10	22-Mar	Objects & Classes		Ch7
	24-Mar	Objects & Classes	Assignment 3 is due	Ch7
11	29-Mar	Inheritance		Ch10
	31-Mar	Inheritance		Ch10
12	5-Apr	Quiz 3: Ch7 Ch10	Assignment 4 assigned	
	7-Apr	Recursion		Ch11
13	12-Apr	Recursion		Ch11
	14-Apr	Exceptions	Assignment 4 is due	Ch12
14	19-Apr	Input/Output	Assignment 5 assigned	Ch9
	21-Apr	Java GUI		Ch15
15	26-Apr	Java GUI		Ch15
	28-Apr	Java GUI	Assignment 5 is due	Ch15
16	3-May	Java GUI		Ch15
	5-May	Quiz 4: Ch11, 12, 9, 15	Group project is due	

Course & Instructor Policies

eLearning will be used for class content (e.g., class slides and assignment descriptions) and the recording of grades. Slides and class exercises will be posted before or after class. Class announcements (e.g., change in assignment dates) will also be posted.

Attendance Policy: Attendance is critical. Students are expected to attend all classes to achieve maximum success. Attendance is taken for extra credit and contact tracing for COVID-19, and a detailed description is listed in the

Academic Integrity: The University is committed to academic excellence and expects academic honesty from all members of the University community and believes that it is essential for academic excellence and integrity. Academic honesty includes adherence to guidelines established by the instructor in a particular course for both individual and group work. It prohibits representing the work of others to be one's own (plagiarism); receiving unauthorized aid on an assignment (cheating); and using similar papers or other work products to fulfill the obligations of different classes without the instructor's permission. Penalties for academic dishonesty may

include a grade of "F" on the work in question or for the course. In addition, any student engaged in academic dishonesty will be subject to disciplinary action. Please refer to the General Polices website (see below) for detailed information pertaining to academic dishonesty, including procedures for determining disciplinary action.

NO WORKING TOGETHER on Individual Assignments: This course will have a considerable amount of computing work for application assignments. Each student is expected to do their own work on the "individual" assignments. **Copying another student's work (computer files) or having another person do your work is scholastic dishonesty and will be dealt with accordingly.** You are allowed to discuss the assignments but are not allowed to post or ask codes directly. The instructor will use code similarity detection software to detect possible cheating behavior in homework lab submissions.

General Policies & Procedures

For information regarding general University policies and procedures, please go to http://go.utdallas.edu/syllabus-policies. These policies include the following:

- Technical Support
- Field Trip Policies, Off-Campus Instruction and Course Activities
- Student Conduct and Discipline
- Academic Integrity
- Copyright Notice
- Email Use
- Withdrawal from Class
- Student Grievance Procedures
- Incomplete Grade Policy
- Disability Services
- Religious Holy Days
- Avoiding Plagiarism

These descriptions and timelines are subject to change at the discretion of the Instructor.