Course	ITSS 3312 – Object-Oriented Programming
Instructor	Chenzhang Bao
Term	Spring 2019
Meetings	Tuesday & Thursday, 5:30 p.m. – 6:45 p.m. Room JSOM 12.214

Instructor: Chenzhang Bao

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(prefer not use e-learning message / discussion board)

Office: JSOM 3.226

Office Hours: Tuesday & Thursday 4:00 p.m. – 5:30 p.m. or
After each class – 7:00 p.m. or
by appointment / email
Room: my office / 3.413 Ph.D. Lounge

Prerequisites

(ITSS 3311 or ITSS 3211) and (MATH 1326 or MATH 2414 or MATH 2419) and (MATH 2333 or OPRE 3333 or MATH 2418 or MATH 2415 or CS 2305).

It is expected that students have basic operational experience with computers and the ability to learn advanced programming concepts quickly. This is a course which ramps up in difficulty fairly quickly so students, particularly those with little prior programming experience, should be prepared to put in a lot of effort and time into this course.

Course Description

This is an introductory course. 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.

Suggested Textbook

Introduction to Java Programming (Brief Version), 10th Edition, by Y. Daniel Liang
Pearson Education Inc., publishing as Prentice Hall
(ISBN-10: 0-13-359220-0; ISBN-13: 978-0-13-359220-7)

Supporting Materials

1. Tutorials: http://docs.oracle.com/javase/tutorial/
2. Course Slides and Notes will be posted on eLearning course site.

Environment

Required Hardware: Laptop (Windows or Mac).

Required Software: Java JDK

Required Software: Eclipse IDE for Java Developers

More details are discussed in the files posted in E-learning

- howto_install_java_jdk
- howto_install_eclipse_for_java_developers

Supporting Computing Resources

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.

Documentations with step-by-step details of how-to install the above required software applications will be posted in E-Learning.

Homework and Exams

There will be **five** homework assignments and **two** exams throughout the course. **No extra credit is available.**

Homework Policy

Descriptions and answers will be posted in the E-Learning. All assignments are to be submitted via E-Learning. I do not accept assignments via email. If you submit an incorrect assignment or need to resubmit your assignment in eLearning you will be allowed to resubmit as long as it is before the due date. Grading will be based on the latest version.

Students are required to do the homework **independently**.

Students are required to submit their homework on time. The deadline for submitting an assignment is 5:30 PM (right before the class) on the due date. Late submissions can still be submitted via E-Learning up to 24 hours after the deadline. Assignments submitted within 24 hours after the due date/time will be subject to a 25% penalty. No submissions will be accepted later than 24 hours after the deadline.

Make-Up Policy

Make-up exams will be allowed **ONLY** with the **prior** permission of the instructor. Students will be required to provide necessary documentation.

All requests, including re-grading, regarding to a homework assignment or an exam must be submitted in writing via email.

Grading

The student's grade in the course will be based on the following items:

Grade Component	Points
Five Assignments	**45**
Exam 1	**25**
Exam 2	**25**
Attendance	**5**
Total	**100**

The final letter greade will be determined as follows:

A+	**96-100**	**B+**	**81-85.99**	**C+**	**67-69.99**	**D+**	**57-59.99**	**F**	**<50**
A	**90-95.99**	**B**	**76-80.99**	**C**	**64-66.99**	**D**	**54-56.99**		
A-	**86-89.99**	**B-**	**70-75.99**	**C-**	**60-63.99**	**D-**	**50-53.99**		

Course Schedule, Assignments, and Due Dates

This is a tentative class schedule; students are encouraged to look at the course website at least once a week for updates.

WEEK	DATE	TOPICS	CHAPTER	HW
1	01/15 – 01/17	Course Overview Introduction to Eclipse IDE Installation of JDK and Eclipse		
2	01/22 – 01/24	Elementary programming review (Ch.2, 4) Handling exceptions & Basic I/O (12)	2, 4, 12	HW #1 out
3	01/29 – 01/31	Selection statements (Ch.3) Loops (Ch.5)	3, 5	HW #1 due HW #2 out
4	02/05 – 02/07	Array: single- and multi-dimensional (Ch.7 & 8)	7, 8	HW #2 due
5	02/12 – 02/14	Objects and Classes (9) Class attributes / methods and their scopes (6)	6, 9	HW #3 out
6	02/19 – 02/21	Objects and Classes: Variables and their scopes (9,10)	9, 10	
7	02/26 – 02/28	Review for Exam 1, any uncovered topics		HW #3 due
8	**03/05**	**Exam 1: Part I**		
8	**03/07**	**Exam 1: Part II**		
9	03/12 – 03/14	Object-Oriented Concepts: Abstraction & Encapsulation (10)	10	HW #4 out

10	03/19 – 03/21	*Spring Break*		
11	03/26 – 03/28	Object-Oriented Concepts: Inheritance & Polymorphism (11,13)	11, 13	
12	04/02 – 04/04	Java GUI programming with WindowBuilder in Eclispe IDE Swing - the Java GUI widget toolkit http://www.prenhall.com/savitch/details.html Introduction to WindowBuilder in Eclipse IDE		HW #4 due HW #5 out
13	04/09 – 04/11	Java GUI programming with a simple database Insert data into the database		
14	04/16 – 04/18	Java GUI programming with a simple database Retrieve and display data from the database		
15	04/23 – 04/25	Review for Exam 2, any uncovered topics		HW #5 due
16	**04/30**	**Exam 2: Part I**		
16	**05/02**	**Exam 2: Part II**		

Course & Instructor Policies

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

Instructor Response Policy: The instructor will respond to all student inquiries (emails, voice messages, etc.) within 48 hours (excluding holidays and weekends).

Attendance Policy: Attendance is extremely important. Students are expected to attend all classes in order to achieve maximum success. Attendance will be taken and used in consideration for the Participation grade; however, this grade will also reflect the instructor's judgment of the value of contributions to class discussion. There is no makeup for missed in-class assignments.

Late Work: All assignments are due at the beginning of class (not during and not after), on the specified date. I do not accept late assignments unless ***prior*** arrangements have been made with the instructor.

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.

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.

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