



**Course** ITSS 3212 Object-Oriented Programming  
**Instructor** Mingwen Yang  
**Term** Fall 2017  
**Meetings** Wednesday, 4 p.m. – 6:45 p.m.  
Room JSOM 12.222

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**Instructor:** Mingwen Yang  
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**Office:** JSOM 3.222  
**Office Hours:** Wednesday 10 a.m. to 12 p.m. and by appointment

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### Prerequisites

Prerequisites: ITSS3211, MATH 1326, and MATH 2333 or OPRE 3333 or MATH 2418 or CS2305.

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### 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.

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### 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.
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### Suggested Textbook

Introduction to Java Programming, 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)

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### Supporting Information

1. Suggested tutorials: <http://docs.oracle.com/javase/tutorial>
2. Course Slides will be posted on eLearning course site.
3. 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.
4. Step-by-step details on how to install the above required software applications will be provided in class.

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### Required Software

#### **Java JDK**

- For Window OS Users

Java JDK - Java SE 8 Update 65 or later

**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: 65 or later

There are 2 versions of the Java JDK, 32-bit and 64-bit, available for downloads. Students should use the 32-bit version no matter which version (32-bit or 64-bit) of the Windows operating system is installed in their laptop. (Notes: it is normal to install 32-bit software applications to run on the x64 Windows 7 operating system)

Free download of Java JDK – Java SE 8 Update

Link: <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

Java JDK file name to download for 32-bit: jdk-8u111-windows-i586.exe

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

Free download of Java JDK – Java SE 8 Update 65

Link: <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

Java JDK file name to download for MAC OS X x64: jdk-8u111-macosx-x64.dmg

#### **Eclipse IDE for Java Developers**

Free download of Eclipse: [http://eclipse.bluemix.net/packages/mars.1/index\\_b.html](http://eclipse.bluemix.net/packages/mars.1/index_b.html)

**Important Notes:** Many packages of Eclipse IDE are available for downloads. Students must be sure that the correct package of Eclipse (Eclipse IDE for Java Developers) is selected, downloaded, and installed. More details are discussed in the file: `howto_install_eclipse_for_java_developers.docx` that is posted in e-learning.

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.

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### Homework and Exams

There will be six homework assignments throughout the course. Descriptions of assignments will be posted as they are assigned. All homework and answers, including sample of java code, will be posted in the E-Learning. The lowest homework grade will be dropped. Students are required to submit their homework on time.

There will be three exams: Exam 1, Exam 2, and Final. The Final is take-home programming exam (it is due 24 hours after assigned).

**No extra credit are available.**

### Make-Up Policy

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

### Late-work Policy

All assignments are to be submitted via E-Learning.

The deadline for submitting an assignment is 11:00 AM 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.

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### Course Schedules

*This is a tentative class schedule; changes to the schedule will be posted in eLearning.*

Week	Date	DESCRIPTION	
1	08/23/17	Course Overview Introduction to Eclipse IDE Installation of JDK and Eclipse Elementary Programming in JAVA	HW 1 is assigned

2	08/30/17	Elementary Programming in JAVA Handling exceptions in Java programming	
3	09/06/17	Selection statements	HW 1 is due HW 2 is assigned
4	09/13/17	Loops Review for Exam I	HW 2 is due
5	09/20/17	<b>Exam I</b>	
6	09/27/17	Arrays: single-dimensional and multi-dimensional Objects and Classes	HW3 is assigned
7	10/04/17	Objects and Classes	HW4 is assigned
8	10/11/17	Object-Oriented Concepts: Abstraction & Encapsulation	HW 3 is due
9	10/18/17	Object-Oriented Concepts: Inheritance & Polymorphism Review for Exam II	HW 4 is due
10	10/25/17	<b>Exam II</b>	
11	11/01/17	Java GUI	HW 5 is assigned
12	11/08/17	Java GUI	
13	11/15/17	Java GUI	HW 5 is due HW 6 is assigned
14	11/22/17	<b>No Class - Thanksgiving and Fall Break</b>	
15	11/29/17	Java GUI Review for Final	HW 6 is due
16	12/06/17	<b>Final</b>	

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### Grading Policy

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

Grade Component	Points
Homework	40%
Exam I	15%
Exam II	20%
Final (Programming, take-home)	15%
Course Attendance/Participation	10%
Total	100%

The final letter grade will be determined as follows:

Final Point Total	Letter Grade
96-100	A+
90-95.99	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

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### 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.

**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.

**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.**

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### 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.*