Shanghai Jiao Tong University

AU420 Introduction to Java Programing

Instructor:	Chentao Wu	**Email:**	wuct@cs.sjtu.edu.cn
Home Institution:	Shanghai Jiao Tong University	**Office:**	TBD
Office Hours:	TBD		
Term:	28 May-28 June, 2018	**Credits:**	4 units
Classroom:	TBD	**Teaching Assistant(s):**	TBD
Class Hours：	Monday through Thursday, 5.30-7.30 pm		
Discussion Session:	2 hours each week, conducted by teaching assistant(s)		
Total Contact Hours:	66 contact hours (1 contact hour = 45 mins, 3000 mins in total)		
Required Texts (w/ ISBN):	W. Savitch, Pearson （2015）*Java, An Introduction to Problem Solving & Programming*, 7th edition ISBN-13: 978-0133766264 ISBN-10: 0133766268		
Prerequisite:	MA077 Linear Algebra		

Course Overview

This course offers an introduction to computer science and computer programming in Java. With emphasis on object-oriented programming practice and problem-solving skills, the course presents a balanced coverage of Java language basics, programming concepts and techniques, standard algorithms and applications.

Learning Outcomes

On successful completion of the course, the student should be able to
- Provide an overview of the Java programming language
- Describe the basic techniques of computer program in general and object-oriented in particular
- Define Java classes and methods
- Design and implement simple computer programs in Java that are correct, clear, well-organized and well-documented
- Apply simple data structures and algorithms to solve problems
- Use Linux systems to write, debug, and execute programs

Grading Policy

Class Attendance and Participation
You are expected to attend each class session. You will be responsible for all material covered during any absence. Your active participation in class discussions is very much encouraged and it will definitely enhance the learning process.

Reading and Preparation
You are expected to read the assigned chapters/sections before the class session in which they will be discussed.

Programming Projects
Programming projects will be assigned during the term in order to facilitate your understanding of the material, and will be due on a designated date and time. They will be collected and graded. Projects will be graded based on their correctness and completeness, the efficiency and presentation. In general late projects will not be accepted for credit.

Quizzes
A number of quizzes will be given throughout the summer course.

Exams
There will be a midterm exam and a final exam. Exams will be comprised of questions and problems based upon textbook, topics covered in the class.

Quizzes	15%
Participation & Professional Classroom Conduct	5%
Programming Projects	20%
Midterm	25%
Final Exam	35%

Grading Scale

Number grade	Letter grade	GPA
90-100	A	4
85-89	A-	3.7
80-84	B+	3.3
75-79	B	3
70-74	B-	2.7
67-69	C+	2.3
65-66	C	2
62-64	C-	1.7
60-61	D	1
≤59	F (Failure)	0

Academic Dishonesty

Acts of academic dishonesty include:

    a) unauthorized assistance on an examination;

    b) falsification or invention of data;

    c) unauthorized collaboration on an academic exercise;

    d) plagiarism;

    e) misappropriation of resource materials;

    f) any unauthorized access of an instructor's files or computer account; or

    g) any other serious violation of academic integrity as established by the instructor."

Notes

You may find the following link useful: http://java.sun.com/docs/books/jls/html/index.html (Java Language Specifications)

Course Schedule

Date	Topics
28-May	Overview of computer hardware, software, computer programming and applications
29-May	Java variable types, expressions, simple I/O
30-May	Java flow of control and basic programs-1
31-May	Java flow of control and basic programs-2
4-Jun	Quiz 1 Object-oriented programming practice-1
5-Jun	Object-oriented programming practice-2
6-Jun	Java classes and methods-1
7-Jun	Java classes and methods-2
11-Jun	Arrays, and applications-1
12-Jun	Arrays, and applications-2 Quiz2
13-Jun	Simple sorting algorithms-1
14-Jun	Simple sorting algorithms-2
18-Jun	Java streams and file I/O-1
19-Jun	Java streams and file I/O-2
20-Jun	Recursion and applications-1
21-Jun	Recursion and applications-2 Quiz 3
25-Jun	Basic GUI programming-1
26-Jun	Basic GUI programming-2
27-Jun	Summary
28-Jun	Final Exam