



CSC 021: Programming in Java

Term: Winter, 2019

Time: Monday – Friday, 5 Weeks

Class Sessions per Week: 5

Class Session Length (minutes): 150

Total Contact Hours: 60

Credit Hours: 4

Course Description

This course aims to provide students with an introductory understanding of modern programming techniques, skills and issues, in the context of scientific, engineering, and commercial applications. The course uses the Java programming language to achieve this aim. More specifically, the objectives of this course are to introduce students

to basic concepts, principles, and applications of computing. To learn the fundamentals of Object-Oriented Programming. To get skilled in computer programming in Java. To develop basic software development skills. Mastery in Java programming language will give you superpowers to turn your imagination into reality (any form of software, engineering product or service)

Textbook(s)

Introduction to Programming in Java: An Interdisciplinary Approach Robert Sedgewick and Kevin Wayne Publisher: Addison-Wesley, 2007.

Grading

Attendance	10 %
Homework	10 %
Quizzes	20 %
Midterm Exam	30 %
Final Exam	30%
Total	100 %

A: 90-100 A-: 85-89 B+: 82-84 B: 78-81 B-: 75-77 C+: 72-74 C: 68-71 C-: 64-67 D: 60-63
F: <60

Schedule

Week 1

Java Data Types

Conditional and loops



Arrays

Week 2

Input and Outputs

In-class coding performance

Functions and Modules

Static Methods Libraries and Clients

Week 3

Recursion

Creating Data Types

Designing Data Types

Algorithms and Data Structures: Performance

Week 4

Sorting and Searching

In-class coding performance

Stacks and Queues and Symbol Tables

Week 5:

Reading Day

Review Session

Final Exam

Policies

Exam and Attendance

No make-ups for missed exams. If legitimate absence, midterm exam can be excused. Attending all class meetings is required. Students are responsible for missing class by any reason. We will be covering a lot of material quickly so it is detrimental to miss even a day.

Academic Honesty

Xihua University expects all students to do their own work. Instructors will fail assignments that show evidence of plagiarism or other forms of cheating, and will also report the student's name to the University administration. A student reported to the University for cheating is placed on disciplinary probation; a student reported twice is suspended or expelled.

Special needs

Students with disabilities and special needs should consult with the professor early in the semester. Recording of lectures is permitted.