

CS 365 - Java Programming

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Fall 2019

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Office Hours: Fri 10-1

Office: CS Adjunct Office

Web: github.com/melvyniandrag/IntroToJavaFall2019/

Class Hours: Wed 7-9:45pm

Class Room: TBD

Course Description

In this fun, fast-paced class you're going to become a better computer programmer. You'll learn the Java Programming Language and do a number of small projects that give you exposure to a few fascinating things you can do with it. This class will make you more employable and provide the foundation for you to go on and learn languages and technologies related to Java.

Required Materials

- Machine with a Java compiler and speakers.

Course Objectives

- Learn Java
- Successfully use popular and/or interesting open source Java libraries

Course Structure

Class Structure

This material will likely be new to you, and it's very interesting. There will be weekly lectures and assignments as well as two exams. Every week we will cover a new aspect of Java, there will be an in class programming task(s) and there will be a related assignment due the following lecture. In the event that you miss a class there will be related reading materials posted online so you can still complete your assignment.

Grading

Weekly programming assignments based on the materials covered in class. 2 exams bringing together various aspects of topics taught. No late assignments accepted! Lowest weekly assignment grade will be dropped to account for whatever personal problem may arise. Exams will be programming tasks.

Grading Policy

Grading is as follows:

- 20% Midterm exam.
- 20% Final exam.
- 60% Average of weekly assignments.

For example, if you get an 80 on exam 1, an 85 on exam 2, and (to simplify assume there were only two weekly assignments) your weekly assignment scores are [90, 95], your final score will be $20\text{pts} * 0.80 + 20\text{pts} * 0.85 + 60\text{pts} * (0.90 + 0.95) / 2 = 88.5 \text{ pts}$, and will be translated to the appropriate letter grade following NJCU guidelines.

Schedule and weekly learning goals

The schedule is tentative and subject to change. The learning goals below should be viewed as the key concepts you should grasp after each week, and also as a study guide before each exam.

Date: 09/04

- Your first program in Java.
- Basics of the language.

Date: 09/11

- Summary of week 1 for those who missed.
- Classes and Objects
- Bitwise operators

Date: 09/18

- Annotations
- Interfaces and Inheritance

Date: 09/25

- Numbers and Strings
- Generics
- Packages

Date: 10/02

- Java Collections

Date: 10/09

- Exceptions
- I/O
- Concurrency

Date: 10/16

- Midterm
- DateTime API

Date: 10/23

- Unicode. UTF8/ASCII/UTF16

Date: 10/30

- Swing GUIs

Date: 11/06

- Doing Math with Java

Date: 11/13

- Making Music

Date: 11/20

- Drawing with Java

Date: 11/27

- Algorithms. DFS/BFS.

Date: 12/04

- Java web backends.