

Roosevelt University: CST 150 – Computer Science I

Michael E. Ruth, Ph.D.

Course Meetings: M/W, 3:30PM to 5:35PM @ Gage Bldg, Rm. 518

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Course Description:

An introduction to the methods and procedures for the development of logical, well-structured computer programs using the Java programming language. An average of 10 hours per week is necessary to work on homework. The three logical constructs of sequence, selection, and iteration are emphasized.

Course Objectives:

- Explain the problem solving process used by developers and its practical implications
- Examine fundamental primitive types in Java and the operators which operate on them.
- Describe the process of employing the three basic logical constructs (sequence, selection, and iteration) to formulate algorithms to solve problems using Java.
- Discuss the implementation of the logical constructs using control statements in Java.
- Develop and Document well-structured Java programs to solve simple problems.
- Apply several introductory programming concepts such as function calls, parameter passing, scope/lifetime, Object-oriented Programming techniques, methods, etc.

Textbook:

Java How to Program: Late Objects Version, 8th Ed. by P.J. Deitel
ISBN: 978-0136123712

Grading: (+/- grading is used):

- 2 Exams (20 % each)
- Final Exam (25 %)
- Quizzes/Labs/Assignments (10% each)
- Class Participation (5%)

Course Policies:

- You only have **three free** absences. After that, you will be penalized a letter grade for each additional absence. Make them count!
- **You are responsible** for all material covered and all announcements regardless of delivery method!
- **There will be no make-up examinations.**
 - *If you miss an exam **due to an emergency**, your final exam grade will count for **both!***
- Late homework will **NOT** be accepted.
- Arrive in class **on time** and **silence all noise-producing equipment!**

Disabilities:

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact the Office of Disabled Student Services, 310 Herman Crown Center, 312-341-3810, or e-mail nlitke@roosevelt.edu as early as possible in the term.

Academic Honesty:

Any instance of cheating will result in a grade of 'F' on that assignment / exam. A second offense will result in an 'F' in the course. Each assignment must represent ***your own work***. You may discuss the assignments with other students, but you cannot copy or share assignment artifacts. Grievance procedure is at: [http:// roosevelt.edu/current/judicial/](http://roosevelt.edu/current/judicial/)

Tentative Course Schedule:

Date	Topic	Reading
8/30	Introduction to CST 150/Computers	Syllabus, 1
9/1	Introduction to Java	1
9/8	Primitives & Operators	2.1-2.4
9/13	Primitives & Operators (cont.)	2.5-2.8
9/15	Problem solving using Java	3.1-3.4
9/20	Introduction to Control Statements	3.5-3.7
9/22	Formulating Algorithms	3.8-10
9/27	Formulating Algorithms (cont.)	3.11-3.13
9/29	More Control Statements	4.1-4.5, 4.7
10/4	Exam #1	
10/6	More Control Statements (cont.)	4.6, 4.8, 4.9
10/11	Introductions to Methods	5.1-5.4
10/13	Methods	5.5-5.7
10/18	Methods (cont.)	5.8-5.9
10/20	Methods (cont.)	5.11-5.12
10/25	Introduction to Arrays	6.1, 6.3
10/27	Declaring, Creating, and Employing Arrays	6.4-6.6
11/1	Exam #2	
11/2	Last Day to withdraw with a 'W'	
11/3	More on Arrays	6.7-6.11
11/8	Introduction to Classes/Objects	7.1-7.3
11/10	Introduction to Classes/Objects (cont.)	7.4, 7.6
11/15	Classes/Objects	8.1-8.3
11/17	Classes/Objects (cont.)	8.4-8.6
11/29	Classes/Objects (cont.)	8.7-8.8, 8.14-8.15
12/1	Fundamentals of Characters and Strings	6.14-6.15
12/6	File Processing and I/O	6.16-6.19
12/8	Exception handling	11.1-11.2
12/13	Final Exam	