

Summer Online CSCI 1151 - Computer Programming I - Syllabus

Course Information

Textbook: Malik, D. S., Java Programming : From Problem Analysis to Program Design, fifth edition

Zoom Q&A Sections: twice a week, meeting time TBA, meeting link posted on Moodle

Software: jGRASP, Discord, Zoom (all free)

Instructor

Jia Wan

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Virtual Office Hours: Zoom Meeting

Office Hours: TBA or by appointment

Goals of the Course

This course serves as an introduction to the field of computer science. By studying this course, you will

- understand basic computer elements in the hardware layer and software layer and how these elements interact
- gain knowledge of the ethical, moral, and legal issues associated with applications in programming and computer science
- understand basic computer programming concepts and techniques as they appear in Java
- understand the relationship between software design and implementation
- be literate about concepts and techniques of computer programming
- be prepared for entry into further computer programming courses.

Zoom Q&A Meetings (optional)

The group meetings twice a week (about one hour each time) are for practice purpose and it is also my chance to answer your questions regarding course material, homework problems and exam preparation. These meetings will be recorded and posted for students who miss them.

Homework

Homework sets are posted on Moodle for each week. Each HW consists of two parts: a basic fact quiz and a project (1-3 programs).

- The quiz consists support multiple times submission. You are welcome to correct your answers with new tries as many times as you want before the deadline of each quiz.
- The programming problems should be typed as a Word document with java files for programming problems and submitted on Moodle (as in .pdf and .java). A standard template of the HW file with specific requirements can be found on Moodle. No late homework is accepted or excused. Homework assignments worth 100 points in total. You may collaborate on the programming problems but copying each other's solution is prohibited.

Tutoring

Posting on the course's Discord forum channel will get you timely support from peer students and tutors. You are also welcome to schedule individual video meetings with tutors on portal. You will need to schedule individual meetings beforehand.

Exams

There will be two tests and a cumulative final exam, each worth 100 points. Each will be distributed on Moodle and required to be submitted on Moodle in the .pdf format. An instruction of how to convert a handwritten work to a pdf file can be found on Moodle. Please note that students won't be given access to computers for any aid other than downloading and submitting the tests.

Tentative Schedule

Week of	Material
Week 1	Overview of Computers and Programming Languages, Basics of Java
Week 2	Basic Elements of Java, Test 1
Week 3	Introduction to Objects and Input/Output, Graphical User Interface
Week 4	Control Structures: Selection and Repetition, Test 2
Week 5	User-Defined Methods, Final Exam

Grading

Grades will be determined by your percentage out of the total possible 400 points with the standard:

93 – 100	A	73 – 76	C
90 – 92	A-	70 – 72	C-
87 – 89	B+	67 – 69	D+
83 – 86	B	63 – 66	D
80 – 82	B-	60 – 62	D-
77 – 79	C+	below 60	F

Key to Success

- Set up a study plan and stay solid with it. Summer class moves fast and students who are behind with some material usually find them challenged to catch up.
- We will have a Discord forum channel which allows all students to share their products, questions and answers anytime. Tutors and the instructor will be available on the channel. In addition, self-scheduled tutoring is available via Randolph College portal.
- Solutions to homework problems and tests will be posted online once they are submitted. Use these wisely.
- Logic is the key to solve problems including to make a program run (in the way you expect). Be prepared to spend more time on thinking of the design of an algorithm, drawing a program diagram, and debugging than what you spend on actually typing codes.
- One factor ignored by many programming beginners is the importance of basic terms and language syntax, even though they reveal the art of a programming language on the initial design level. While our class goes relatively fast over some details, reading the textbooks will prepare you better. All the lecture notes will be posted on Moodle. Use them wisely.
- Programming is a skill just like playing any of the musical instruments: Practice is the key!
- Collaboration on ideas of programming problems is allowed; pair-programming is encouraged; but brutal-copied solution is a violation of honor-code.