Course program and reading list

Semester 1 Year 2024

School: Efi Arazi School of Computer Science B.Sc

Introduction To Computer Science

Lecturer:

Dr. Kfir Bar   kfir.bar@runi.ac.il

Tutors:

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Teaching Assistant:

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Course No.:	Course Type :	Weekly Hours :	Credit:
417	Lecture	6	6

Course Requirements :	Group Code :	Language:
Final Paper	241041701	Hebrew

Prerequisites

Students who took one of the courses listed below will not be allowed to register to the course Introduction To Computer Science (417):

3600 – Deep Learning

◎ Course Description

Objectives: The course exposes students to computer science fundamentals and equips them with solid programming skills, using a hands-on approach. Key elements of the theory and practice of computer science are presented in the context of programming examples and exercises. Through this experience, students develop an appreciation of the elegance and rigor of computer science, and become competent Java programmers. The course assumes no previous experience, except for high-school level mathematics.

Methodology: 13 semester weeks, each consisting of two 2-hour lectures, one 2-hour recitation (תירגול), One 2-hours workshop (סדנה (and a homework assignment. Of these course elements, the homework assignments are by far the most important. Students should expect to work 6-12 hours a week on each homework assignment.

The course grade is based on a final exam (60%), and homework assignments (15%). In order to pass the course, students must get at least 60 in the final exam.

Textbook: Introduction to Programming in Java: An Interdisciplinary Approach by Sedgewick and Wayne (any edition is fine). Copies of this book are available at RUNI's library, as well as in most on-line bookstores. The textbook is recommended, but not required.

Advanced reading: If you are an experienced programmer, we recommend Effective Java, by Joshua Bloch. The material covered in this book is not part of this course and is aimed at experienced programmers only.

English is the official written language of this course. The spoken language in the lectures is Hebrew in the regular tracks and English in the international track; in all tracks though, all written materials (lecture notes, homework, web site, etc.) are in English. The course provides an excellent opportunity to improve your English in an applied context.

Questions and answers are welcome and encouraged. Post your questions on the course's Questions and Answers (Q&A) forum, and they will be answered shortly by the course staff, or by students who know the answer and want to help out.

The course website and the Q&A forum are the hub of all the course activities. The lecture slides, homework assignments and course materials for every week will be uploaded to the course website ahead of time. The course website is the official repository of all the course's announcements, rules and regulations. If we say x in a class meeting and the course website says y, you must ignore x and do y. Each student is responsible for visiting the course website and Q&A forum daily and following the instructions listed there.

Civilized behavior in and out the class activities is expected. Please refrain from doing things that would irritate you if you were to teach this course. Examples include being late to class meetings, posting silly messages in the Q&A forum, not following instructor requests during class activities, and so on. Use your judgment.

Course Goals

See "course description".

Grading

See "course description".

Reading List

See "course description".