

The Hebrew University of Jerusalem Syllabus

Introduction to Object Oriented - 67125

Last update 10-09-2024

HU Credits: 4

<u>Degree/Cycle:</u> 1st degree (Bachelor)

Responsible Department: Computer Sciences

<u>Academic year:</u> 0

Semester: 1st and/or 2nd Semester

<u>Teaching Languages:</u> Hebrew

Campus: E. Safra

Course/Module Coordinator: Dr. Rachel Behar

<u>Coordinator Email: rachel.beharharr@mail.huji.ac.il</u>

Coordinator Office Hours: coordinated via email

Teaching Staff:

Mr. Ariel Rimon,

Mr. Yoseph Dayani,

Mr. Jeremie Sasson,

Mr. omri benbenisty,

Dr. Rachel Behar,

Mr. Nissim Barzilay

Course/Module description:

In this course we will learn object oriented design patterns using Java

Course/Module aims:

- 1. Learning OOP principles
- 2. Learning Java
- 3. Learning advanced coding skills

<u>Learning outcomes - On successful completion of this module, students should be able to:</u>

Understanding and having the ability to program using advanced OOP principles

Attendance requirements(%):

0

Teaching arrangement and method of instruction:

Course/Module Content:

Java: javadoc, debugging, collections, generics, exceptions, streams, nested classes

OOP: classes, objects, constructors, static/non-static members, inheritance, overloading, interfaces, polymorphism, encapsulation.

OOP principles: writing modular code, design patterns

Functional Programming

Required Reading:

NA

Additional Reading Material:

NA

Grading Scheme:

Computerized Exam - At the cluster % 60 Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 40 %

Additional information: