

# The Hebrew University of Jerusalem Syllabus

# Introduction to Object Oriented - 67125

Last update 17-12-2023

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. Jonathan & apos; Weiss,

Ms. Mika Littor,

Mr. Yoseph Dayani,

Mr. Elkana Tovey,

Mr. omri benbenisty,

Dr. Rachel Behar,

Ms. Karin Vashdi

#### 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:**

Written / Oral / Practical Exam 50 % Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 50 %

# Additional information: