The Hebrew University of Jerusalem

Syllabus

Introduction to Object Oriented - 67125

Last update 05-08-2022

<u>HU Credits:</u> 4

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

<u>Responsible Department:</u> Computer Sciences

<u>Academic year:</u> 0

<u>Semester:</u> 1st Semester

<u>Teaching Languages:</u> Hebrew

<u>Campus:</u> E. Safra

<u>Course/Module Coordinator:</u> Edan Patt

<u>Coordinator Email:</u> edan.patt@mail.huji.ac.il

<u>Coordinator Office Hours:</u> coordinated via email

<u>Teaching Staff:</u>

Dr. roy schwartz,
Mr. lior forer,
Ms. Rachel Behar,
Mr. omri benbenisty,
Ms. noa viner,
Mr. Ori levi,
Mr. EREL DEBEL,
Ms. esther shizgal

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
4. Practicing algorithms via code

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

Regex

Basic algorithmic programming

Functional Programming

<u>*Required Reading:*</u>
 NA

 <u>*Additional Reading Material:*</u>
  NA

  <u>*Course/Module evaluation:*</u>
  End of year written/oral examination 60 %
  Presentation 0 %
  Participation in Tutorials 0 %
  Project work 0 %
  Assignments 35 %
  Reports 0 %
  Research project 0 %
  Quizzes 0 %
  Other 5 %
Completing Website Tasks

<u>*Additional information:*</u>