

# *The Hebrew University of Jerusalem*

## *Syllabus*

### *Introduction to Object Oriented - 67125*

*Last update 10-09-2024*

*HU Credits:* 4

*Degree/Cycle:* 1st degree (Bachelor)

*Responsible Department:* Computer Sciences

*Academic year:* 0

*Semester:* 1st and/or 2nd Semester

*Teaching Languages:* Hebrew

*Campus:* E. Safra

*Course/Module Coordinator:* Dr. Rachel Behar

*Coordinator Email:* [rachel.beharharr@mail.huji.ac.il](mailto:rachel.beharharr@mail.huji.ac.il)

*Coordinator Office Hours:* coordinated via email

*Teaching Staff:*

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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

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*

*Functional Programming*

Required Reading:

NA

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Additional Reading Material:

NA

Grading Scheme:

Written / Oral / Practical Exam 60 %

Submission assignments during the semester: Exercises / Essays / Audits / Reports  
/ Forum / Simulation / others 40 %

Additional information: