



## *The Hebrew University of Jerusalem*

### *Syllabus*

## *DESCRIPTIVE SET THEORY - 80962*

*Last update 19-02-2022*

*HU Credits: 3*

*Degree/Cycle: 2nd degree (Master)*

*Responsible Department: Mathematics*

*Academic year: 0*

*Semester: 2nd Semester*

*Teaching Languages: Hebrew*

*Campus: E. Safra*

*Course/Module Coordinator: Omer Ben-Neria*

*Coordinator Email: [omer.bn@mail.huji.ac.il](mailto:omer.bn@mail.huji.ac.il)*

*Coordinator Office Hours:*

*Teaching Staff:*

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Prof Omer Ben-Neria

Course/Module description:

We will survey the theory of Borel equivalence relations, with an emphasis on countable group actions, classification problems, and Borel graph combinatorics.

Course/Module aims:

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

To be familiar with the theory of Borel equivalence relations.

Attendance requirements(%):

100

Teaching arrangement and method of instruction: Seminar

Course/Module Content:

We will survey the theory of Borel equivalence relations, with an emphasis on countable group actions, classification problems, and Borel graph combinatorics.

Required Reading:

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Additional Reading Material:

- (1) A. Kechris (1995), "Classical Descriptive Set Theory"
- (2) S. Gao (2008), "Invariant Descriptive Set Theory"

Course/Module evaluation:

End of year written/oral examination 0 %  
Presentation 0 %  
Participation in Tutorials 0 %  
Project work 0 %

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*Assignments 100 %*  
*Reports 0 %*  
*Research project 0 %*  
*Quizzes 0 %*  
*Other 0 %*

*Additional information:*