

Syllabus

## **TOPICS IN ADVANCED COMBINATORICS - 80972**

Last update 03-08-2023

HU Credits: 2

Responsible Department: Mathematics

<u>Academic year:</u> 0

Semester: 2nd Semester

<u>Teaching Languages:</u> Hebrew

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

Course/Module Coordinator: Nathan Linial

Coordinator Email: nati@cs.huji.ac.il

Coordinator Office Hours: by appointment

<u>Teaching Staff:</u> Prof Nati Linial

<u>Course/Module description:</u> We will cover several topics of current interest from the forefront of combinatorics. We will use the book of van Lint and Wilson for general background and will add other materials to it

Course/Module aims:

To get acquainted with some of the current topics of interest in combinatorics

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

The will be able to follow current literature and get involved in research in combinatorics

<u>Attendance requirements(%):</u> 60%

Teaching arrangement and method of instruction: Class lectures

Course/Module Content:

partitions,Young tableaux, RSK correspondence, increasing sub-sequences in permutations, graph limits, flag algebras, advanced enumerative combinatorics, combinatorial designs

<u>Required Reading:</u> Van Lint and Wilson, A Course in Combinatorics

<u>Additional Reading Material:</u> current literature

Grading Scheme: Essay / Project / Final Assignment / Home Exam / Referat 100 %

Additional information: