

Lecture 1: What is a Pseudorandom Object?

Expanders and Pseudorandom Graphs (Fall 2024)
University of Toronto
Swastik Kopparty
Scribes: Nicholas Kwan and Siddharth Agarwal

1 Administrative Stuff

Course Title: Expanders and Pseudorandom Graphs

Course Code: MAT1306 / CSC 2429

Course Webpage: <https://www.math.toronto.edu/swastik/courses/topics-F24/>

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Grading:

- Scribe notes: 30%
- HW: 30%
- Final paper project: 40%

The final project will involve reading a paper from a list to be given later, writing a 10 page report, and giving a 10 minute presentation

Prerequisites:

- Mathematical maturity
- Linear algebra
- Probability
- Some algebra / analysis

Textbooks:

- Scribe notes
- A survey paper on expanders, by Hoory, Linial, and Wigderson, available at <https://www.cs.huji.ac.il/~nati/P>
- *The Probabilistic Method*, by Alon and Spencer