

**Information Sheet**  
**MATH858P Fall 2019**  
**Selected Topics in Analysis: Harmonic analysis methods for random**  
**and low-rank matrices**

**Instructor:** Radu Balan

**Lectures:** Tuesday, Thursday, 11:00pm-12:15pm, CSI 4122.

**Office Hours:** by appointment ; preferably Tuesdays 5:00pm-6:05pm, MATH 2308.

**Contact Information:** Email [rvbalan@math.umd.edu](mailto:rvbalan@math.umd.edu) , Math Building, Room 2308, x55492 / CSCAMM , Room 4131 , x51217

MATH 858P Selected Topics in Analysis Functional Analysis is a graduate level course in mathematics presents results in harmonic analysis and functional analysis.

**Recommended Textbooks:**

*Matrix Analysis*, Rajendra Bhatia, Springer 1997.

*Topics in Random Matrix Theory*, Terence Tao, AMS 2012

**Grading.** There will be one mid-term exam (100 points), homework assignments (for a total of 100 points), and a report (200 points).

**Homeworks.** Homework must be submitted on the date assigned. Homework must be prepared without consulting any other person. You may however consult any written reference. In this case you should cite the reference. Results taken from the reference should be (re)stated to the notation used in the course. Explanations should be given in complete English sentences. Written work must be legible and clear.

**Academic Integrity.** You are expected to adhere to the University's Code of Academic Integrity, available online at: <https://www.faculty.umd.edu/teach/integrity.html>

**Students with Disabilities:** If you have a documented disability and wish to discuss academic accommodations with me, please contact me as soon as possible.

**Religious Observances.** If you will be absent from class because of religious observances, please submit a list of the dates of your absences within a couple of days.