Math 518 – Functional Analysis

Dr. Troitsky

Winter 2017:

Homework: Homework will be assigned and collected weekly or bi-weekly. Once a week we will have a homework session, where we will discuss homework problems. Participation in these sections is strongly encouraged.

Tests: There will be a midterm and a final exam in this course. The exams will test knowledge of definitions, proofs of results from the course, and ability to apply them. Exams are "closed books, closed notes".

Syllabus: Locally convex spaces, weak topologies and duality in Banach spaces, weak compactness in Banach spaces, structure of classical Banach spaces, local structures, infinite-dimensional geometry of Banach spaces and applications.