Course **SYLLABUS** – Math 539: *FUNCTIONAL ANALYSIS I*, Spring 2002

**CALL #:** 35797

**TIME:** Usually W 1-2, F 1-3 in BH 316

**(Remark:** Sometimes we will change the days of classes. The week of January 27-31 we will have classes on MF 1-2 PM. We will have an extra HW problems session once in a week or in two weeks. This would be either on W 2-3 or F 3-4.)

**INSTRUCTOR:** Shmuel Friedland  
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**OFFICE HOURS:** 12-12:50 M, 10:30-11:30 W,F.

**GRADING:** Grade would be decided by homework problems. Students are encouraged to work in groups, but everyone should submit his or her own solution.


The following chapters sections will be covered:

I.2: Metric and normed linear spaces.  
II: Hilbert spaces- Sections 1-3.  
III: Banach spaces;  
IV: Topological spaces: Sections 1,2,4.  
VI: Bounded operators.  
VII: The spectral theorem: Sections 1-3.


**PREREQUISITE:** Math 533 (Real Analysis I) or consult the instructor.