

Math 757 Course Outline

Spring 2013

TTH 2:00 -3:15

Text: *Functional Analysis. An Introduction*
by: Yuli Edelman, Vitali Milman, Antonis Tsolomitis

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Homework assignments <http://www.math.sc.edu/~schep/homework757-2013.html>

Final: Take Home exam, counting 20%

Weekly HW: 80%. The text has extensive hints, so hw grading will often be a check to see whether you have understood the hint

Material to be covered: Chapters: 6, 7, 8, 10, 11 plus supplement on Sobolev spaces

Attendance policy: A grade penalty can be invoked, if more than 10% of classes are missed.

Learning Objectives: The objective of this course is to provide you with the basic Hilbert space operators. If you are successful you will be able to read more advanced research papers in Functional Analysis, apply the main theory (Spectral theorem of self-adjoint operators, unitary operators, unbounded self-adjoint operators; Banach algebras, Sobolev embedding)

Cellphone policy: Please turn your phone off or on silent mode while in class.