

Functional Analysis
Math 6143 Spring 2015

Faculty: Prof. D. Alspach, MS 529, 744-5784, alspach@math.okstate.edu.

Prerequisites: This course assumes a rigorous background in real analysis and elementary functional analysis such as in Math 5143/5153. (Abstract measure theory and integration, point-set topology, basic versions of the Hahn-Banach, Uniform Boundedness, and Open Mapping theorems, Hilbert spaces, representation of the duals of the L^p and $C(K)$ spaces.)

Text: Peter Lax, *Functional Analysis*. We will cover material from Chapters 1-22 and Appendix B.

Examinations: There will not be any in-class exams. The final will be *take-home*.

Homework: A very important part of the course is the homework. I will be assigning problems from each chapter and collect solutions approximately every two weeks.

Grading: The homework will count two-thirds of the grade and the final one third.