

FUNCTIONAL ANALYSIS

Instructor: Prof. Michael Jury, University of Florida

Text: *A Course in Functional Analysis*, John B. Conway, Springer (GTM 96)

The course will be a brief introduction to functional analysis, including the following topics:

- Review of Hilbert spaces
- Operators on Hilbert space
- Banach spaces (including the Hahn-Banach theorem, the Principle of Uniform Boundedness, open mapping and closed graph theorems, dual spaces and weak topologies)
- An introduction to Banach algebras and C^* -algebras