

# FACULTY OF SCIENCE Department of Mathematics and Statistics

### Applied Mathematics 617

### Analysis IV

(see Course Descriptions for the applicable academic year: <a href="http://www.ucalgary.ca/pubs/calendar/">http://www.ucalgary.ca/pubs/calendar/</a>)

Also known as: (formerly Pure Mathematics 617)

## Syllabus

### **Topics**

 $\mathcal{L}^{p}$ -spaces and  $\mathcal{L}^{p}$  spaces

Normed linear spaces, Hilbert spaces

Linear Functionals, Hahn-Banach Theorem

Operators, Spectra

Operators on Finite Dimensional Spaces

Spectral Theory in Infinite Dimensional Spaces

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91.09.03 as PMAT 617 (relabelled AMAT 617 04:07:01) BB.II