

PMATH 810—Banach algebras and operator theory

Topics covered will include: Banach algebras, spectral theory, the Riesz functional calculus, the abstract index group, Gelfand transform, Banach space and Hilbert space operators, C^* -algebras, linear functionals and states, GNS construction, von Neumann algebras, strong/weak operator topologies, Double Commutant theorem, spectral theorem for normal operators. There is no text required. Grades will be based on weekly homework assignments.