B4.1 Functional Analysis Revision Classes

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Here is my suggested list of questions for the revision classes. Advance requests for particular questions not included on the list are very welcome and will be discussed during the Q&A sessions, but please email me in advance (preferably, by Tuesday evenings) to let me know what you would wish to see discussed.

Wednesday, Week 3, 1pm-3pm: Recap of basic material, may include bookwork type questions. Separability, dual spaces, second duals, basic operator theory (spectral theory relegated to Week 4). Relevant past exam questions: 2008Q2, 2009Q1, 2017Q1(a)(b), 2015Q1, 2013Q1, 2018Q3. Followed by a brief Q&A session on basic material.

Friday, Week 3, 1pm-3pm: Mainly Hahn-Banach Theorem and applications. Relevant questions: 2006Q3, 2007Q3, 2008Q3, 2014Q3(c), 2017Q1(c). Depending on time constraints, possibly also: 2017Q1(d), 2018Q3(c), 2010Q1. Followed by a Q&A on any topic.

Wednesday, Week 4, 2pm-3pm: Spectral theory. Relevant questions: 2006Q4, 2007Q4, 2008Q4, 2017Q3(c)(d), 2013Q3, 2018Q2(a)(c)(d).

Friday, Week 4, 2pm-3pm: Q&A session on any topic.

Wednesday, Week 5, 2pm-3pm: TBA.

Friday, Week 5, 2pm-3pm: TBA.