

Revision Classes B4.1 Functional Analysis 1

Plan for revision classes taught by Melanie Rupflin (in W2,3,4) and by Jonah Duncan (W5). Information on the other revision sessions taught by Dominik Kobos will be made available in a separate file.

Many session will be have one main topic and the majority of the time will be spent going through past exam questions on this topic. I have listed some proposed questions to discuss below, but you are welcome to send in further questions that you would like to see covered by email. Please send such emails no later than Wed 4pm, and specify precisely which part of which question you would like to see discussed. Questions should be sent in to Melanie Rupflin (rupflin@maths.ac.ox.uk) for the classes in W2,3,4 and to Jonah Duncan (duncan@maths.ox.ac.uk) for the classes in W5.

In addition, there will be a session, which will focus on more basic material and is also an opportunity to ask any questions on material from the lecture notes that you would like to see explained again (again, preference will be given to any questions sent in by email), one class where we will discuss questions from any topic that is of interest and the last sessions which will focus on the exams of the last 2 years.

- Thursday W2 2-3 Recap of basic material and discussion of any sent in questions on bookwork proofs, or variations of such bookwork proofs.
- Thursday W2 3-4 Normed spaces and linear operators and related past exam questions such as 2016 Q1, 2015 Q1 (ii)-(iv) 2015, 2012 Q 1 (b), 2016 Q3 and sent in questions
- Thursday W3 2-3: Hahn-Banach and related past exam questions such as 2014 Q2(d), 2015 Q2, 2016 Q2(c) and sent in questions
- Thursday W3 3-4: Density and Stone Weierstrass, dual spaces and second duals and related past exam questions such as 2017 Q2(c)(ii), 2012 Q2 (b), 2013 Q 2 (b), 2014 Q3 (b), 2016 Q2 (d)
- Thursday W4 2-3: Spectral Theory and related past exam questions such as 2015 Q3, 2012 Q3
- Thursday W4 3-4: Questions on any topic
- Thursday W5: 2-4: Last years exam and any parts of questions from the 2017 exam that students ask to see discussed by email