Topics on final exam
APPM 5450 Spring 2015 Applied Analysis 2

The final exam will cover these parts of the Hunter and Nachtergaele book. The relative importance of each section will be similar to what was emphasized in class and on the homeworks.

1. Chapter 7, Fourier series
   Sections 7.1 and 7.2 only (skip 7.3–6.6)

2. Chapter 8, BLO on Hilbert spaces
   Sections 8.1–8.4 and 8.6 (skip 8.5 and section 8.6 from Thm. 8.46 onwards)

3. Chapter 9, Spectrum of BLO
   9.1–9.4 (skip 9.5–9.6, though 9.5 may be on the prelims)

4. Chapter 10 – skip

5. Chapter 11, Fourier Transform
   11.1–11.8 (skip 11.9–11.12)

6. Chapter 12, Measure theory and Function spaces
   12.1–12.8 (skip 12.9–12.11. The subject of 12.9 is Sobolov space, and you should know this in the context of chapter 7 and chapter 11 (e.g., Def 11.38 in chapter 11.8)).

7. Chapter 13 – skip