Real Analysis tutorials Sem 2 2021

· About me

- My name is Alex Elzenaar.
- I am a postgraduate (masters) student interested in the intersection between geometry and combinatorics. I have strong interests also in topology, algebraic geometry, number theory, ...
- I am happy to answer questions via email at aelz176@aucklanduni.ac.nz (within reason) but please direct course admin questions directly to Melissa or Pedram.

• Admin

- You are grownups, this is a 300-level paper and the tutorials are relatively small. You
 make the decisions about what you want to do.
- There are tutorial questions.
- Tutorials are not compulsory for 332.
- I am not to bothered whether or not you answer the tutorial questions or whether you
 want to talk about other maths (hopefully real analysis) as long as, whenever you come,
 you are actively engaging with something.
- If you have done all the tutorial problems beforehand in any week, I strongly recommend still coming — I can give you some other things to think about, and you can help the others out too.
- In particular, if you need help with general mathematics questions (like proving things)
 please ask. Also, please ask about history¹ or motivation or anything else, it is all mathematics.
- I know that 8am is an annoying time, but hopefully the benefits of having a small number of people outweigh that. There are two other streams, Thursday at 1pm and Friday at 11am. Melissa and/or Pedram is running the Thursday stream and I am running the Friday stream. If you want to attend a different stream, please ask the person running that stream in advance and be prepared for them to say no. In particular my Friday stream is very full (almost 30 enrolled).
- Where this leads? ... Too early in the course to ask this!! Here are some courses you could consider next year if you like analysis:
 - MATHS 333 (follow on from this course) analysis in metric spaces and \mathbb{R}^n
 - MATHS 341/740 complex analysis (not offered next year ⊕)
 - MATHS 731 functional analysis
 - MATHS 350/750 point-set topology

¹Here is a good book: John Stillwell, Mathematics and Its History, PDF available for free on SpringerLink