

Guidance for those taking the course

Rolf Suabedissen

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Analytic (or General) Topology is a wide field - any course needs to be selective on what it covers and in which generality it covers the chosen topics. I believe that almost all the material covered in this course is central to General Topology and indeed useful outside the field of General Topology.

Except for the material on Stone Duality, you can find all of the material covered in Engelking, General Topology. Be aware that he uses slightly different language in places. A somewhat more basic approach which still should cover most things in Willard, General Topology.

There are two versions of the lecture notes: the 'Lecture Notes' are roughly what I will base my lectures on, but as always lectures are a live performance and thus will differ from what is written down in there; the 'Minimal Lecture Notes' contain the examinable material in shorter form with most of the proofs skipped or severely summarized, only giving the main idea. This may be useful especially for reference or revision.

Both versions of the lecture notes likely contain typos, inaccuracies and possibly more serious mistakes. These are not a replacement for books and thinking yourself! If you do find any mistakes or are not sure about something, please let me know.

Problem Sheets are part of the examinable course content (unless otherwise noted). Problem Sheet 0 is for you to get back into the mindset of topology and to check that you are ready to progress with the main course.

Problem Sheets 1-4 each have two pages: one page with the questions and a second page with hints on how you might approach the questions. I strongly recommend to try the problems without looking at the second page first and only when you have really struggled look at the hints. If the hints are not enough, please do e-mail me for more hints (instead of looking online).

You can find all solutions online - but looking them up is going to be useless before the classes since you only learn by trying yourself, not by following someone else's solutions.

All questions on the problem sheets can be considered Section B questions, so you should attempt them all and write proper solutions to them. Section A consists of completing all the 'straightforward' checks left out in the lecture notes and being able to reconstruct the proofs from the Minimal Lecture Notes. I can give you an almost limitless amount of (relevant) Section C problems, again, please ask by e-mail.