

Dear All,

Some notes about the upcoming Final Exam.

The test will take place on Monday December 16 at 2-5pm at KC Knox, the gym of the Knox Presbyterian Church at 630 Spadina Avenue. This is not Knox College! Please familiarize yourself with the location some time in advance. Please get there a bit early and bring an ID, as per the usual UofT exam procedures.

It will be a "closed book" exam: no books and no notes of any kind will be allowed, no cell-phones, no calculators, no devices of any kind that can display text. So only stationary will be allowed, as well as minimal hydration and snacks, and stuffed animals for joy and comfort.

The material for the test is everything that was covered in class unless it was clearly indicated as "extra" at the time that it was covered. Here "everything" means every bit of class material (including every single proof) and anything that was assigned as homework. It does not include material covered only in tutorials because such material differs between the different tutorial groups.

The style of the test will be "solve the following 8 questions", or maybe 6 or 10. Some of the questions will be about classroom material, like proving something that was proven in class. Some will be taken from the HW assignments, and some will be fresh.

The best way to study for the test is to make sure that you understand absolutely everything (same "everything" as before). Make a long list of definitions and lemmas and theorems, and make sure that you know every single one. Go over every homework exercise and make sure that you know how to solve it perfectly.

Also useful, though less, is to go over old exams. You can find a couple at https://drorbn.net/index.php?title=10-327/Final_Exam and at <https://www.math.toronto.edu/~drorbn/classes/18-327-Topology/FE.html> (that one has a discussion about how I write exams – it remains valid). But note that both of these exams cover more point-set topology than we've covered this year, but do not cover material related to the fundamental group. I have no old exams that cover that material – so go back to the previous paragraph, and simply make sure that you understand everything perfectly, including everything that was assigned as homework.

Neatness counts! Language counts! The *ideal* written solution to a problem looks like a page from a textbook; neat and clean and consisting of complete and grammatical sentences. Definitely phrases like "there exists" or "for every" cannot be skipped. Lectures are mostly made of spoken words, and so the blackboard part of proofs given during lectures often omits or shortens key phrases. The ideal written solution to a problem does not do that.

I will not hold my weekly office hours next week (on December 3) because I will be visiting my kids in the West Coast (both of them took topology as undergrads!). I will be holding my office hours on Tuesday December 10 as usual. In addition, I will be available for a study marathon on Sunday December 15 (the day before the exam) on the 6th floor of the Bahen building, from 10am until 5pm (though I'll take a lunch break). I expect that groups of students will be studying at various locations: the graduate lounge, room 6180, room 6183, and next to my office. I will cycle between these locations throughout that time.

Brinda will also hold pre-exam office hours – on Friday December 13 and on Saturday December 14 at 10am-1pm, at the grad lounge on the 6th floor of the Bahen building.

Good luck!

Dror.