

MATH 319 (Section 101)

Introduction to Real Analysis

Session 2021W Term 1, (Sept-Dec 2021)

Instructor Information

Instructor: Joshua Zahl

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Course Information

Class Time: MWF 11:00 - 12:00

Class Location: BIOL 1001

Course Webpage: <https://canvas.ubc.ca/courses/79829>

Homework assignments and all relevant course information (such as practice problems, final exam venue) will be posted on the course webpage.

The instructor will hold two weekly **office hours**. See Canvas for details

Text: There is no required textbook for this course. The recommended texts are

- *Real Analysis with Applications*, by Kenneth R. Davidson and Alan Donsig. Full text available online through UBC library.
- *Calculus for Cranks*, by Nets Katz. Available for free online.
- *Principles of Mathematical Analysis*, third edition, by Walter Rudin. Available on reserve at UBC library, and also at the UBC Bookstore.

Prerequisites: One of the following two requirements:

- (a) a score of 68% or higher in MATH 220
 - (b) a score of 55% or higher in one of MATH 223, MATH 226.
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Covid Safety in the Classroom

Masks: Masks are **required** for all indoor classes, as per the BC Public Health Officer orders. For our in-person meetings in this class, it is important that all of us feel as

comfortable as possible engaging in class activities while sharing an indoor space. For the purposes of this order, the term “masks” refers to medical and non-medical masks that cover our noses and mouths. Masks are a primary tool to make it harder for Covid-19 to find a new host. You will need to wear a medical or non-medical mask for the duration of our class meetings, for your own protection, and the safety and comfort of everyone else in the class. You may be asked to remove your mask briefly for an ID check for an exam, but otherwise, your mask should cover your nose and mouth. Please do not eat in class. If you need to drink water/coffee/tea/etc, please keep your mask on between sips. Please note that there are some people who cannot wear a mask. These individuals are equally welcome in our class.

Vaccination: If you have not yet had a chance to get vaccinated against Covid-19, vaccines are available to you, free, and on campus at the Life Sciences Institute at 2350 Health Sciences Mall. The higher the rate of vaccination in our community overall, the lower the chance of spreading this virus. You are an important part of the UBC community. Please arrange to get vaccinated if you have not already done so.

Seating in class: To reduce the risk of Covid transmission, please sit in a consistent area of the classroom each day. This will minimize your contacts and will still allow for the pedagogical methods planned for this class to help your learning.

Your personal health and class attendance

If you're sick, it's important that you stay home – no matter what you think you may be sick with (e.g., cold, flu, other).

- A daily self-health assessment is required before attending campus. Every day, before coming to class, complete the self-assessment for Covid symptoms using this tool: <https://bc.thrive.health/covid19/en>
- Do not come to class if you have Covid symptoms, have recently tested positive for Covid, or are required to quarantine. You can check this website to find out if you should self-isolate or self-monitor:
<http://www.bccdc.ca/health-info/diseases-conditions/covid-19/self-isolation#Who>.

If you miss class because of illness, lectures will be recorded and posted on the course webpage after class. You are also encouraged to attend virtual office hours.

If you do not feel ill, you are expected to attend class in person. Math is challenging; and active, in-person participation is important to your academic success.

You are encouraged to make connections early in the term with other students. Members of your study group can support each other by sharing notes and ideas, and by checking in on each other.

If you are sick on a midterm exam day, please email the instructor as soon as you are confident you should not come to the scheduled exam. We would strongly prefer that you contact us to make an alternate arrangement than for you to come to the exam while you are ill. If you do show up for an exam and you are clearly ill, you will not be able to write the exam and we will make alternate arrangements with you. It is much better for you to email ahead of time and not attend. Remember to include your full name and student number in your message

If you are sick on the final exam day, do not attend the exam. You must apply for deferred standing (an academic concession) through Science Advising no later than 48 hours after the missed final exam. Students who are granted deferred standing write the final exam at a later date. Learn more and find the application online:
<https://science.ubc.ca/students/advising/concession>

For additional information about academic concessions, see the UBC policy here:
<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0>

Instructor health

If I (the instructor) am sick: I will do my best to stay well, but if I am ill, develop Covid symptoms, or test positive for Covid, then I will not come to class. If that happens, here's what you can expect:

- If I am well enough to teach, but am taking precautions to avoid infecting others, we may have a synchronous online session or two. If this happens, you will receive an email to your UBC email address telling you how to join the class. You can anticipate that this would likely be a last minute email. Our classroom will still be available for you to sit and attend an online session, in this (hopefully rare) instance.
 - If I am not well enough to teach, a colleague will substitute.
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Evaluation

The course mark will be based on weekly homework assignments (20%), two midterms (20% each), and a final exam (40%).

There will be weekly homework assignments, which are due Wednesday at 11:00. Homework should be submitted online using Canvas, and late homework is not accepted. The lowest homework score will be dropped.

There will be two midterms held in-class during regular class hours. These will be held on **Wednesday, October 13th 11:00-12:00** and **Monday, November 15th 11:00-12:00**.

Missing midterms: There are no make-up midterms in this course. Missing the midterm for a valid reason normally results in the weight of that midterm being transferred to the final exam. Any student who misses the midterm is to present to their instructor the Department of Mathematics self-declaration form for reporting a missed assessment to their instructor within 72 hours of the midterm date. This policy conforms with the UBC Vancouver Senate's [Academic Concession Policy V-135](#) and students are advised to read this policy carefully.

Missing the Final Exam:

If you feel ill on a final exam day, you should not attend the exam (see “Your personal health and class attendance” above). If you miss the exam for other reasons, you will need to present your situation to the Dean’s Office of your Faculty to be considered for a deferred exam. See the [Calendar](#) for detailed regulations. In Mathematics, generally students sit the next available exam for the course they are taking, which could be several months after the original exam was scheduled.

Academic Integrity: UBC takes cheating incidents very seriously. After due investigation, students found guilty of cheating on tests and examinations are usually given a final grade of 0 in the course and suspended from UBC for one year. [More information.](#)

Students with Disabilities: Please contact the instructor as soon as possible if you need any special accommodations.

Statement on UBC's Policies and Resources to Support Student Success:

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available [here](#).