

Math 444: Mathematical Research and Writing

Winter Term 2, 2023-24

INSTRUCTOR: Nahid Walji CONTACT: nwalji@math.ubc.ca

<u>CLASS SCHEDULE:</u> Monday/Wednesday/Friday, <u>CREDITS:</u> 3

11am-noon, in FSC-1615

OFFICE HOURS: TBD (details to be posted on Canvas later).

LAND ACKNOWLEDGEMENT:

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the $x^w m \partial k^w \partial j \partial m$ (Musqueam) people. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on in their culture, history, and traditions from one generation to the next on this site. We work with gratitude on it.

PREREQUISITES:

One of MATH 220, MATH 226 and 6 credits of MATH courses numbered 300 or higher.

COREQUISITES:

None.

COURSE DESCRIPTION:

This is for students who would like an introduction to mathematical writing as well as research, and are interested in exploring mathematics constructively. It is suitable for students who would like to further develop their critical thinking skills independently. In addition, presentation skills and ability to professionally typeset mathematics will be developed.

This course is lecture based, integrated with in-class activities such as small group work, question and answer sessions, and student lectures. There will be one project due at the end of the course, supported throughout the term with feedback via drafts. Most weeks there will be a homework assignment due on Friday.

TEXTBOOK:

None required. We will be using resources that are freely available on the internet, and further resources may be posted by the instructor on the course Canvas page.

GRADING:

Percentages: Homework 20%

Participation 15%
Presentations 25%
Project 40%

Homework. This will be usually assigned once a week. Note that your answers must be written up in your own words.

Participation: This is an essential component of this course, and students are encouraged to take an active role in class activities.

Presentations: There will be multiple presentations during the semester.

Project: You will have a group project involving writing a report on a mathematical topic.

LEARNING ACTIVITIES:

There will be in-class activities such as small group work, question and answer sessions, and student lectures.

ASSESSMENTS OF LEARNING:

Students are assessed through written assignments, course participation, presentations, and a group project. Written work should be presented carefully, in complete English sentences, and with sufficient detail. A student must finish a significant amount of term work in order to pass the course.

On special requests: Under no circumstances will there be a possibility for a student to provide additional work in order to make up for a disappointing grade. Similarly, the relative weight of the final grade's components is not subject to adjustments.

UNIVERSITY POLICIES:

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 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 on the UBC Senate website.

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