

## Math 120—Outline

Instructor: Alexia Yavicoli, MATH 110, yavicoli@math.ubc.ca

Office hours: Mondays and Tuesdays 3-4:30 pm, MATH 110

TA office hours: Fridays 3-5 PM

Website: the course Canvas page

Class schedule: Mon/Tue/Wed/Fri 2-3pm in CHEM C126

Attendance is not mandatory, but recommended.

References: the main textbook for this course is

- CLP1 Differential Calculus, by Feldman, Rechnitzer, and Schlicker.

See the course page for a list of additional references.

Slides/notes will be posted. Solutions to homework problems will be posted after the due date.

Topics: roughly the first 3 chapters of CLP1. In brief,

- Ch.1: Tangent lines and limits. Limit laws. Continuity.
- Ch.2: Derivatives. Properties and rules. The Mean Value Theorem.
- Ch.3: Applications of derivatives. Curve sketching. Optimization. Taylor polynomial and its error. L'Hôpital's Rule.

Evaluation: grades, which may be scaled, will be based on

- Homework 30 percent,
- Final 70 percent

We don't accept late homework.

Homework solutions must be typed on LaTeX or using a similar editor online (Overleaf).

There are 6 Homework assignments, essentially every two weeks. They are all due 11:59pm on Friday (Always look at the information in the tab Assignments. There are not assignments during the mid-semester break). Solutions to the Homework assignments will be available in the tab 'files' at the left after the due date and time

We understand that students may have problems such as: falling ill, family problems, problems with technology, etc. For this reason we automatically do the following as an accommodation: at the end of the term, we drop the lowest score among your homework assignments before taking the average. For bigger issues (long term illness, hospitalizations, etc), you should be in touch with the University and let me know by email. It is always a good idea to get documentation with your name on it (from a doctor, for example) in case you have a problem.

The final exam is an in-person exam, it will last 2½ hours and will cover all of the material from the entire course. It will be a closed-book exam, with no calculators. You'll be allowed to bring with you a 8.12 × 11" piece of paper -this is a letter size paper- with what you consider is useful information to have with you during the test (formulas, results, etc). Our aim is to let you demonstrate your mechanical calculation skills; let you demonstrate your conceptual understanding; and let you demonstrate your ability to formally prove mathematical statements (all of them are problems similar to Homework assignments or problems solved during our lectures). The date of the final exam will be fixed by UBC, it should be between Dec 10-21. Students should make sure to

be in Vancouver for this period of time to be able to attend the final exam, should bring their UBC students card and be there with time in advance.

Students with accommodations or special needs should be in touch with the center for accessibility beforehand.