

1. TOPICS:

Limits, derivatives, continuity, the Mean Value Theorem, sketching functions, maxima and minima, optimization, Taylor polynomials, approximation.

2. LECTURES

- (1) Day and Time: Mon Tue Wed Fri, 2:00 p.m. - 3:00 p.m.
- (2) Classroom: Chemistry Building (CHEM). Floor: -1. Room: C126

Attendance is not mandatory, but it is recommended.

3. OFFICE HOURS

- (1) Day and time: Wednesday 11:30-12:30 PM, Friday 12:30-1:30 PM
- (2) Justin's office hours: Tuesday 3:30-5:30 PM
- (3) Classroom or office: MATX 1102

Other supporting resources for questions.

- (1) The Mathematics learning center (open all the time, it's free). It's located in the math building, and there is an online version too.
- (2) Piazza (click the tab at the left). Remember that instructors and TAs are not constantly checking Piazza, so it may take some time to get an answer.

Of course, you can ask question about the lecture, during the lecture.

4. CLASSROOM MATERIALS

All classroom materials are available on the canvas page for the course.

- (1) Lecture notes: to be uploaded after each lecture.
- (2) Solutions to the homework will be available on Canvas after the due date.
- (3) Textbook: https://personal.math.ubc.ca/~CLP/CLP1/clp_1_dc_text.pdf (Chapters 1 to 3).
- (4) An additional book we'll sometimes use: Book of Proof (available online for free).

5. GRADING SCHEME:

Homework counts for 30% and the final exam for 70% of your final grade in MATH 120.

5.1. Homework.

- (1) There are six homework assignments, essentially one every two weeks (the midterm break shifts the schedule).
- (2) Homework solutions must be typed in LaTeX or a similar online editor (e.g., Overleaf). There will be no midterm exams in MATH 120.
- (3) We don't accept late homework. We understand that students may have difficulties such as illness, family problems, issues with technology, etc. For this reason, as an academic concession/accommodation, we automatically do the following: at the end of the term, we drop the lowest score among your homework assignments before taking the average.

- (4) For bigger issues (long-term illness, hospitalization, etc.), you should be in touch with the University and let me know by email. It is always a good idea to obtain documentation with your name on it (from a doctor, for example) in case you have a problem.

5.2. Final Exam.

- (1) The final exam is an in-person exam; it will last 2.5 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 an 8.5×11 piece of paper (this is letter-size paper) with whatever handwritten information on both sides you consider useful to have with you during the test (formulas, results, etc.). Our aim is to let you demonstrate your mechanical calculation skills, your conceptual understanding, and your ability to formally prove mathematical statements. We will provide model final exams.
- (2) The date of the final exam will be set by UBC. Students should make sure to be in Vancouver during this period in order to attend the final exam, should bring their UBC student card, and should arrive well in advance.
- (3) Students with accommodations or special needs should be in touch with the Centre for Accessibility beforehand.

6. ACADEMIC INTEGRITY

Students are expected to familiarize themselves with UBC's definition of academic misconduct: <https://vancouver.calendar.ubc.ca/campus-wide-policies-and-regulations/student-conduct-and-discipline/discipline-academic-misconduct/3-academic-misconduct>. Consequences of academic misconduct may include a grade of zero on an assessment, a failing grade in a course, and suspension or expulsion from the University.

7. OTHER USEFUL RESOURCES AND UBC'S RULES:

7.1. What to do in case of problems.

- Instructors are not involved in registration matters. If you have a registration issue, please fill out the Advising Contact form: <https://www.math.ubc.ca/undergraduate/advising-and-resources>
- If Canvas is not working properly, try refreshing the page, or try opening it in an incognito tab of your browser. If it is still not working, send an email to LT.support@science.ubc.ca
- If you feel unwell, stay home. We'll upload lecture notes; for questions online, you can use Piazza and the online version of the Mathematics Learning Centre.
- In the event of a significant snowstorm, or any other circumstance preventing people from attending our lectures in person, we will send a message containing a Zoom link through Canvas.
- For any other problem related to the course, contact your instructor via canvas email (Inbox $\Rightarrow$ Compose email $\Rightarrow$ Select course $\Rightarrow$ select instructor from list).

7.2. Useful links.

- (1) This webpage <https://detexify.kirelabs.org/#/> lets you draw a symbol and tells you how to write it in LaTeX.

- (2) You can find many resources (course registration, advice, learning resources, the bookstore, libraries, health and wellbeing, etc.) at Student Services: <https://students.ubc.ca/about-student-services/>
- (3) Students requiring support due to physical or learning disabilities may apply for accommodations through the Centre for Accessibility (CfA): <https://students.ubc.ca/about-student-services/centre-for-accessibility/>. Students must register with the CfA (<https://students.ubc.ca/about-student-services/centre-for-accessibility/registering-centre-accessibility/>) before requesting accommodations.
- (4) UBC Policies and Resources to Support Student Success: health and wellbeing, and crisis support services: <https://students.ubc.ca/health/>

7.3. Code of conduct and best practices.

- (1) Respectful conduct is expected towards all individuals. Be inclusive and considerate.
- (2) The use of electronic devices is permissible as long as it does not disrupt the class.
- (3) Promptness is appreciated; late arrivals should enter quietly. If you have something to say quickly to your neighbour during a lecture, remember to whisper softly.
- (4) You don't have to worry about exactly how to address us. Calling us by our names is fine, but lots of other ways of addressing us are also fine.
- (5) Raise your hand during lectures if you want to ask a question, or if you want to point out a (potential) typo that we haven't noticed (typo corrections are always very welcome). Please also raise your hand when we pause during lectures to ask explicitly whether anybody has any questions.
- (6) If you need to send me an email, please use canvas.