

**MATH 364**  
Analysis I  
*Winter 2023*

- Instructor:** Dr. B. Hersey, Office: LB 910 (SGW), Phone: (514) 848-2424, Ext. 8018  
Email: benjamin.hersey@concordia.ca
- Textbook:** *Introductory Real Analysis*, by F. Dangelo & M. Seyfried. Scanned chapters will be posted on Moodle.
- References:** *Introduction to Real Analysis* by William F. Trench. Download at <http://aimath.org/textbooks/approved-textbooks/trench/>  
*Notes on Real Analysis* by L. Larson. Download at <http://www.math.louisville.edu/~lee/RealAnalysis/IntroRealAnal.pdf>
- Assignments:** Homework will be assigned approximately every week, on Moodle. **Late homework will not be accepted.** Submit scanned assignments through Moodle as a **SINGLE PDF file**. **No other formats or ways of submitting your work are allowed.** (There are free scanner apps for your smartphone.) Solutions will be posted on Moodle.  
  
You should provide complete arguments in your work. Some assigned problems will not be marked. Students should attempt all problems.
- Midterm:** There will be a midterm test scheduled in the 7th or 8th week of classes. The exact date of the exam will be announced in class at least a week in advance. **There will be no make-up midterm exam.**
- Final:** To be scheduled by the exams office. Students should plan to be present for the entire exam period and are responsible for finding out the time of the exam when it is announced. Any conflicts or other problems should be reported to the exams office in a timely manner.
- Grading:** 10% Assignments, 30% Midterm, 60% Final Exam  
**OR**  
10% Assignments, 90% Final Exam  
  
If the grading scheme for this course includes graded assignments, a reasonable and representative subset of each assignment may be graded. Students will not be told in advance which subset of the assigned problems will be marked and should therefore attempt all assigned problems.

**Topics:** Time frame is approximate and is meant to include the midterm test.

Weeks	Topics	Chapters
1-3	Elements of Proofs and Set Theory. The Real Numbers.	Chapters 1-2
4-6	Sequences	Chapter 3
7-9	Limits of Functions and Continuity.	Chapter 4
10-11	Derivatives	Chapter 5
12	Elements of Topology (time permitting)	Chapter 11
13	Review	

**Academic Integrity and the Academic Code of Conduct**

This course is governed by Concordia University's policies on Academic Integrity and the Academic Code of Conduct as set forth in the Undergraduate Calendar and the Graduate Calendar. Students are expected to familiarize themselves with these policies and conduct themselves accordingly. "Concordia University has several resources available to students to better understand and uphold academic integrity. Concordia's website on academic integrity can be found at the following address, which also includes links to each Faculty and the School of Graduate Studies: <https://www.concordia.ca/conduct/academic-integrity.html>" [Undergraduate Calendar, Sec 17.10.2]

**Behaviour**

All individuals participating in courses are expected to be professional and constructive throughout the course, including in their communications.

Concordia students are subject to the [Code of Rights and Responsibilities](#) which applies both when students are physically and virtually engaged in any University activity, including classes, seminars, meetings, etc. Students engaged in University activities must respect this Code when engaging with any members of the Concordia community, including faculty, staff, and students, whether such interactions are verbal or in writing, face to face or online/virtual. Failing to comply with the Code may result in charges and sanctions, as outlined in the Code.

**Use of Zoom**

**Note: Zoom is included as an institutionally-approved technology. This means we have been assured of the privacy protections needed to use freely within the classroom.**

Zoom might be used in this course to facilitate learning at a distance. It may be used to record some or all of the lectures and/or other activities in this course. If you wish to ensure that your image is not recorded, speak to your instructor as soon as possible.

Also, please note that you may not share recordings of your classes and that the instructor will only share class recordings for the purpose of course delivery and development. Any other sharing may be in violation of the law and applicable University policies, and may be subject to penalties.

**Intellectual Property**

Content belonging to instructors shared in online courses, including, but not limited to, online lectures, course notes, and video recordings of classes remain the intellectual property of the faculty member. It may not be distributed, published or broadcast,

in whole or in part, without the express permission of the faculty member. Students are also forbidden to use their own means of recording any elements of an online class or lecture without express permission of the instructor. Any unauthorized sharing of course content may constitute a breach of the [Academic Code of Conduct](#) and/or the [Code of Rights and Responsibilities](#). As specified in the [Policy on Intellectual Property](#), the University does not claim any ownership of or interest in any student IP. All university members retain copyright over their work.

**Extraordinary circumstances**

In the event of extraordinary circumstances and pursuant to the [Academic Regulations](#) the University may modify the delivery, content, structure, forum, location and/or evaluation scheme. In the event of such extraordinary circumstances, students will be informed of the change.