

**MATH 364**  
Analysis I  
*Winter 2024*

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- Class Schedule:** Wednesdays, 17:45-20:15.  
Attendance is highly encouraged.
- Office Hours:** TBA.
- Textbook:** *Introductory Real Analysis*, by F. Dangelo & M. Seyfried.
- 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>  
An Interactive Introduction to Mathematical Analysis by Jonathan Lewin  
Cambridge University Press [ISBN: 9781107694040](https://doi.org/10.1017/9781107694040)
- 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 6<sup>th</sup>, 7<sup>th</sup> or 8<sup>th</sup> 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 Exam:** 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

#### 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.

#### Intellectual Property

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#### 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.