

MATH 464
Real Analysis
Fall 2023

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Lectures: Mondays and Wednesdays: 13:15-14:30.

Office Hours: Office hours will be determined in consultation with the class.

Required Textbook: *Real Analysis*, 3rd Edition, by Royden and H.L. MacMillan.
It is important that one use the 3rd Edition and not a different edition.

The print version of the textbook will be available at:

<https://www.bkstr.com/concordiastore/home>

Note: Students should order textbooks as early as possible, especially for print versions in case books are backordered or there are any shipping delays.

Topics: The main parts of the course will consist of topics from the text taken from the following chapters.

- ♦ Set theory
- ♦ The real number system
- ♦ Metric spaces
- ♦ Topological spaces
- ♦ Compact and locally compact spaces

There will be complementary topics as well. Assignments will be given.

Calculators: Only calculators approved by the Department (with a sticker attached as proof of approval) are permitted for the class test and final examination. For a list of Approved calculators see <http://www.concordia.ca/artsci/math-stats/services.html#calculators>.

Term Exams: There will be a test in week 6 or 7.

Grading: Midterm Exam 30%
Assignments 10%
Final 60%

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.

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.

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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.