

**MATH 364 AA**  
Analysis I  
*Winter 2022*

- Instructor:** Dr. G. Dafni, Office: LB 927-15 (SGW), Phone: 514-848-2424, Ext. 3216  
Email: galia.dafni@concordia.ca
- Lectures:** Wednesdays, 6:00 PM - 8:15 PM, LS 110 (SGW).
- Office hours:** TBA
- Textbook:** *Introductory Real Analysis*, by F. Dangelo & M. Seyfried (on reserve at Webster Library). Scanned chapters accessible through Course Reserves.
- References:** *Calculus*, 3rd Edition, by M. Spivak (this and other references will be available on reserve at Webster library).
- Introduction to Real Analysis* by William F. Trench;  
<http://aimath.org/textbooks/approved-textbooks/trench/>
- Notes on Real Analysis* by L. Larson.  
<http://www.math.louisville.edu/~lee/RealAnalysis/IntroRealAnal.pdf>
- Supplement for Measure, Integration & Real Analysis*, by S. Axler  
<https://measure.axler.net/SupplementMIRA.pdf>
- Assignments:** Homework will be assigned and submitted approximately every week, on Moodle. It is the student's responsibility to find out the homework assignment and turn in the homework on time. **Late homework will not be accepted.** Solutions should be carefully written and legible, and provide complete arguments. Some assigned problems may not be marked. **Understanding of the homework is essential to success on the exams.**
- Midterm Test:** 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 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 and location 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 Test, 60% Final Exam  
**OR** 10% Assignments, 90% Final Exam

**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	Chapter 11

**Communication:** Communication between the students and the instructor will take place via in person lectures, Zoom meetings, Moodle announcements and email messages. **Students are responsible for reading and taking note of all electronic communication from the instructor and the University.**

#### **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: [concordia.ca/students/academic-integrity](http://concordia.ca/students/academic-integrity)." [Undergraduate Calendar, Sec 17.10.2]

#### **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 will 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.

#### **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**

Content belonging to instructors shared in courses, including, but not limited to, 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 a 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.