

# Faculty of Science Course Syllabus Winter 2021 (revised October 2020)

# **Department of Mathematics & Statistics**

MATH 2505

Introductory Analysis

Winter 2020/2021

Instructor(s):Xiaoning Bianbian@dal.caOffice hours: Mondays 12-1, Fridays 3-4Lectures:Synchronous, recordings of synchronous lectures will be posted

# **Course Description**

This course is for honours students and other serious students of mathematics. Topics include: the axioms for the real number system, geometry and topology of Euclidean space, limits, continuity, differentiability, the inverse and implicit function theorems.

# **Course Prerequisites**

MATH 2001.03

# **Learning Objectives**

1) Understanding of basic definitions, major theorems in introductory analysis, and understanding of basic concepts and ideas used in developing these results.

2) Ability to reprove major theorems learned, and to prove new claims using them.

#### **Course Materials**

- Textbook: Understanding Analysis Stephen Abbott, 2nd ed.
- Lecture videos and lecture notes on Brightspace

# **Course Delivery (online)**

- On Brightspace & Collaborate Ultra
- Synchronous sessions: TRF 12:35-13:25, attendance is recommended, sessions will be recorded

# Office hours hold by Teaching Assistant

Wednesdays 10:30-11:30, Thursdays 4-5

#### **Course Assessment**

Test 1: 20% Test 2: 20% Test 3: 20% 10 Assignments: 40%

#### **Important Dates**

TESTS in class on Tuesdays Feb 9, Mar 16, and Thursday Apr 8

ASSIGNMENTS due each Tuesday 11am (except the week of study break, and the weeks of Test 1 & 2)



#### Conversion of numerical grades to Final Letter Grades follows the Dalhousie Common Grade Scale

A+ (90-100)	B+ (77-79)	C+ (65-69)	D	(50-54)
A (85-89)	B (73-76)	C (60-64)	F	(<50)
A- (80-84)	B- (70-72)	C- (55-59)		

# **Course Policies on Missed or Late Academic Requirement**

- No late assignments will be accepted. There will be no make-up assignments under any circumstances.
- Tests will be held in class on the dates listed (or in the event of university closure, on the next class day the university is open). Make-up test is available if a Student Declaration of Absence is filed.
- Any student suspected of cheating (e.g. copying other's solutions, using solutions from the internet, having someone answering your question) will be required to pass an oral exam to demonstrate a full understanding of the work submitted.