# Welcome to MATH 3032 - Complex functions and PDEs Winter term 2023

## **INSTRUCTOR:** Dr. Monica Ilie

- Contact info: RB 2019 \* ph: 766-7224 \* milie@lakeheadu.ca
- Office hours: Tuesdays 9:30-10:30 or by appointment

### **COURSE INFORMATION:**

- Class time:
  - 1. Section WA: M/W 2:30-3:45 (RC 1002)
  - 2. Section WB: Tu/Th 11:30-12:45 (RB 3044)
- Lab: Both Sections: Wednesday 11:30-12:20 (UC 0050)
- **Textbook**: Advanced engineering mathematics by Dennis G. Zill and Michael R. Cullen.
- Website: the course website is on MyCourseLink
- **Grading:** Your final grade will be calculated according to the grading scheme below

 $\begin{array}{ccc} \textbf{Grading Scheme} & \text{Assignments} & \text{Midterm} & \text{Final Exam} \\ & 10\% & 40\% & 50\% \end{array}$ 

• Midterm: Common midterm (LAB TIME): Wednesday, March 1, 11:30-12:20 (UC 0050)

## LABORATORY

This hour is designed for informal discussions about the material presented during the lectures. New examples will be solved, but no new material will be covered.

## SYLLABUS

The course covers two separate topics: partial differential equations ( approximately 9 weeks) and complex analysis (approximately 3 weeks).

In the first part of the course we will cover series solutions to ordinary differential equations, Bessel and Legendre equations and series, Fourier series, the method of separation of variables and boundary value problems in rectangular and curvilinear coordinates. In the second part of the course we will cover the set of complex numbers, complex functions and contour integrals.

#### ACCOMODATIONS

Lakehead University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please visit: http://studentaccessibility.lakeheadu.ca

### MISSED FINAL EXAM POLICIES (University Regulations)

In cases where a student misses a formal examination due to an incapacitating illness, the student must have the Certificate of Illness or Incapacitation completed by a Medical Professional and submit the completed form to Enrolment Services no later than three (3) working days after the date of the original final examination. The Certificate of Illness or Incapacitation must be dated as seen by the Medical Professional no later than one (1) working day after the examination.

In other exceptional circumstances, official supporting documentation must be provided (e.g. copy of a death certificate or letter from the funeral home).

Accommodation shall be granted only when the documentation indicates that the onset, duration and severity of the illness or other circumstances are such that the student could not have reasonably been expected to complete the examination on the scheduled date.

**University Regulations** Students will not be given another opportunity to write the examination if <u>it is missed a second time</u>. In some cases, when extraordinary circumstances beyond a student's control prevent him/her from completing the rescheduled examination, a student may be eligible to petition

#### Enrolment Services to explain the circumstances.

A friendly piece of advice: Don't book your plane ticket home until the final exam schedule is published. A booked flight is not an acceptable excuse for missing an exam or a make up final exam!

## CHANGING MARKS

If you disagree and/or have a problem with a particular mark on an assignment or exam, please use the following procedure. First, check your assignment/exam against the solutions. If this does not clear up any problems, on the front of the assignment/exam, please write the question number you want re-graded, and why it should be re-graded. Then hand it back in. I will then take a look at the assignment/exam and see if the mark needs to be adjusted. If there is simply an addition error with the marks, please hand it back in to me with the correct number at the top.

#### **CELLPHONE POLICIES**

In class: I strongly recommend to turn off you cell phone or place it in your bag. Texting during class disturbs you, your colleagues and the friend you are communicating with as they might be in a class as well.

*Exams*: Cellphones are not allowed in the exam room. Any violation of an examination regulation is subject to disciplinary action under the Code of Student Behaviour.

## IMPORTANT DATES

Drop date : Friday, March 10th, 2023

Contingency Dates: Tuesday, April 25th, 2023