

*Welcome to*  
**MATH 3032 - Complex functions and PDEs**  
*winter term 2022*

**INSTRUCTOR:** Dr. Monica Ilie

- **Contact info:** RB 2019 ★ ph: 766-7224 ★ *milie@lakeheadu.ca*
- **Office hours:** 10:00-11:00 (Thursdays, via Zoom) or by appointment

**COURSE INFORMATION:**

- **Class time:**
  1. **Section WA:** M/W 10:00-11:15 (BB 2006)
  2. **Section WDF:** M/W 8:30-9:45 (Zoom synchronous)
- **Lab:** Both Sections: Th 9:00-10:00 (Zoom synchronous)
- **Suggested 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

<b>Grading Scheme</b>	Assignments	Midterm	Final Exam
	10%	40%	50%

- **Midterm:** Common midterm (Thursday, February 17th): Lab time 9:00-10:00 (online, WebWork)

**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.

## **COURSE POLICIES**

Late assignments will not be accepted. If you miss the midterm for a legitimate reason which you can document (e.g. doctor's note), the weight of the midterm will be *transferred* to the final exam. There will be no midterm make-up exams.

## **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>

## **IMPORTANT DATES**

Drop date : March 11th, 2022

Contingency Dates: April 25th, 2022