

# Mathematics 1077: Sequences and Series

## Winter 2015

**Instructor:** Rachael Sundell

**Email:** risundel@lakeheadu.ca

**Lectures:** Tuesday & Thursday, 1:00pm-2:30pm, RB2042

**Lab:** Thursday, 7:00pm-9:00pm, RB2024

**Office Hour:** Tuesdays at 2:30pm-3:30pm or by appointment, RB2006

**Textbook:** *Essentials Of Technical Mathematics With Calculus*, 2<sup>nd</sup> Edition, by Paul Richard

**Course Content:** This course will cover the following material: Exponents and logarithms and their algebra; geometric progressions; binomial coefficients and the binomial theorem; mathematical induction; sequences and their limits; the exponential and natural logarithm functions; infinite series; and tests for convergence of infinite series.

**Lab:** The lab will provide more in depth examples of the material covered in class and give students the chance to ask questions about the content given in class or about the homework questions. **Please email me prior to 4:00pm on Thursday if you plan to attend the lab.**

**Course Website:** The course website can be found through Desire 2 Learn (mycourselink on myinfo). Here you will be able to find assignments and their solutions as well as lecture notes and reviews for exams.

### Grading Scheme:

Assignments	10%
Midterm 1 (Tuesday, February 3 <sup>rd</sup> )	25%
Midterm 2 (Tuesday, March 10 <sup>th</sup> )	25%
Final Examination	40%

NOTE: If one of the midterm marks is lower than the final examination, the weight of that midterm will be moved to the final examination, giving the following grading scheme:

Assignments	10%
Midterm	25%
Final Examination	65%

**Assignments:** There will be a total of 6 assignments given approximately every two weeks. The lowest assignment grade will be dropped. All assignments should include a cover page with the following information: course number, assignment number, student name and ID. Assignments should be dropped off in the assignment boxes on the second

floor of the Ryan building before 24:00 midnight of the due date. Solutions will be available on the course webpage the day after the assignment is due. **Late assignments will not be accepted.** Students are encouraged to work together to understand the concepts in each assignment, but individual assignments must be submitted and copying is not allowed.

**Midterm and Final Exam:** There will be two midterm examinations on Tuesday, February 3<sup>rd</sup> and Tuesday, March 10<sup>th</sup>. Midterms and the final examination will be closed book, but students are allowed to bring a one-sided sheet of 8½x11 paper of personal study notes and a nonprogrammable calculator. If a midterm is missed, there will be no makeup test. If a valid excuse is given (e.g., doctors note), then the weight of the midterm will be moved to the final examination.

**Important Dates:** Please note the following important dates:

January	5 <sup>th</sup>	: First day of classes
January	16 <sup>th</sup>	: Final date to register
February	3 <sup>rd</sup>	: First Midterm
February	16 <sup>th</sup>	: Beginning of Reading Week
March	6 <sup>th</sup>	: Final date for withdrawal
March	10 <sup>th</sup>	: Second Midterm
April	3 <sup>rd</sup>	: Good Friday - University Closed
April	7 <sup>th</sup>	: Final day of class
April	10 <sup>th</sup>	: First day of exams
April	23 <sup>rd</sup>	: Final day of exams
April	24 <sup>th</sup>	: Contingency Date

**Tutoring:** At the Student Success Centre (SC 0008), every student has 5 free hours of tutoring every academic year. The Lakehead University Mathematics Assistance Centre (LUMAC) provides free tutoring in LI-1005 throughout the academic year (for hours visit <http://math.lakeheadu.ca/lumac/>).