

MATH 0005B – Precalculus: Functions and Graphs – Fall 2024

School of Mathematics and Statistics, Carleton University

Instructor: Dr. Lucy Campbell

Office: 4269 Herzberg Building

Office hours: Virtual in **Brightspace**, and in-person in-office, time to be decided.

E-mail: campbell@math.carleton.ca

Course information: <http://www.math.carleton.ca/~campbell/MATH0005B> and in **Brightspace**

Please only contact me through your Carleton email account or through Brightspace. Email from any other account runs the risk of being summarily deleted as spam.

Lectures: Tues/Thurs, 1:00 - 2:30 PM, starting Jan 9, in **Nideyinan 180**.

Notes and videos in **Brightspace**.

Tutorials: Thurs, 2:30 - 3:30 PM, in **Tory 342**.

Prerequisites:

Grade 11 Functions (University/College Preparation) or Grade 11 Functions and Relations (University Preparation), or equivalent.

Note that this course is not available for degree credit for students who have successfully completed Grade 12 Mathematics - Advanced Functions, or an equivalent High School functions course.

Topics:

Review of algebraic manipulations. Polynomials: the remainder theorem, and the factor theorem; graphing. Real and Complex roots. Absolute values. Inequalities. Functions, including composition of functions, and Inverse functions. Logarithmic and exponential functions.

Textbook (required): Basic Technical Mathematics, 11th Edition, by Allyn J. Washington.

Grading scheme:

10 % — Eight short online quizzes in **Brightspace**.

40 % — Three tests during the tutorial time in the tutorial classroom on Feb 1, Feb 29, Mar 21.

50 % — A final examination scheduled during the Winter Term exam period in April.

There will be no make-up, early or delayed tests. Only absences due to serious and unforeseen illness, jury duty or extreme personal misfortune may be excused. Otherwise, any missed evaluation will be counted as zero.

Homework: Selected exercises from the text will be posted in Brightspace. These must be done for practice, not to be handed in. In order to succeed in the course you **must** do the homework on a regular basis and attend tutorials regularly.

Winter Break (Reading Week): There will be no classes from Feb 19–23.

Calculator: You may use a non-programming, non-graphing calculator for the tests and the final examination. I reserve the right to prohibit the use of any calculator.

Academic Accommodation: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodation in this course, please contact the PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, email me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodation for the formally-scheduled exam (if applicable). For pregnancy or religious obligations, write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.