MATH 0005B-Precalculus: Functions and Graphs

Term: Winter 2021 Instructor: Zahra Montazeri Office: HP 4220; Tel: 520-2600 Ext. 4225 E-mail: zahra@math.carleton.ca

Lectures: Tuesdays, Thursdays, 11:35-12:55pm, (Online). The first day of class is January 12. Office Hours: Tuesdays, 1:00-2:00pm

Note: This course is not available for degree credit for students who have successfully completed: Grade 12 University Preparation Mathematics-Advanced Functions and Introductory Calculus (MCB4U) or an equivalent High School Functions course.

Prerequisites: Grade 11 Functions and Relations (University Preparation), or Grade 11 Functions (University/College Preparation), or equivalent. Students who do not have the stated prerequisite may be automatically deregistered during the term.

Text Book: Basic Technical Mathematics, 11th Edition, by Allyn J. Washington, Pearson Prentice Hall.

Tutorial: B1: Thursdays, 13:35-14:25 .The first day of tutorial is January 21.

Marking Scheme: The course will be made up to 4 parts

•	Weekly Tutorials and Quizzes	-16%
•	Assignments —	24%
•	Tests —	- 30%

• Final Exam — 30%

Tests (Term Mark): Three tests (50 minutes each) are scheduled on the following dates: **February 4**, **March 4**, **and April 1 in the tutorial hour**. No make-up, early, or delayed tests will be held. Tests/exam are proctored through a live Zoom meeting and students need to turn on their camera during tests/exam.

Assignments: There are four assignments will be posted on CuLearn and students need to upload the solutions on the following dates: January 31, February 28, March 21 and April 6.

Tutorials: You are required to attend all tutorials. TA will present to work out some selected problems, to answer questions, take weekly quizzes (there are 8 quizzes) and to administer the tests.

Final Exam: There will be a formally open-book three hours final exam scheduled by university during April 16-27.

Sections to be covered from the textbook: 1.1, 1.2, 1.4, 1.6-1.10, 3.1-3.4, 5.1, 5.2, 5.3, 6.1-6.7, 7.1, 7.3, 11.1-11.5, 12.1, 12.2, 13.1-13.3, 13.5, 13.6, 15.1-15.3, 17.1-17.4.

Homework: Selected exercises, mainly from the text, will be assigned in class. These exercises are not to be handed in and will not be graded. However, to succeed in the course it is absolutely essential that you do the exercises on a regular basis.

Calculator: You may use non-programmable, non-graphing calculators for the tests and the final exam.

Course descriptions: 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.

Academic Accommodation

Pregnancy obligation: Write 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. For more details, see the Student Guide.

Religious obligation: Write 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. For more details, see the Student Guide.

Students with disabilities: requiring academic accommodations in this course must register with the Paul Menton Centre for Students with Disabilities (PMC) for a formal evaluation of disability-related needs. Documented disabilities include but are not limited to mobility/physical impairments, specific Learning Disabilities (LD), psychiatric/psychological disabilities, sensory disabilities, Attention Deficit Hyperactivity Disorder (ADHD), and chronic medical conditions. Registered PMC students are required to contact the PMC every term to have a Letter of Accommodation sent to the Instructor by their Coordinator. In addition, students are expected to confirm their need for accommodation with the Instructor no later than two weeks before the first assignment is due or the first in-class test/midterm. If you require accommodations only for formally scheduled exam(s) in this course, you must request accommodations by the official accommodation deadline published on the PMC website.