

Pre-Calculus Math 40S – Course Outline

Mathematical wisdoms...

"Mathematics is a game played according to certain simple rules with meaningless marks on paper."

- David Hilbert

"In mathematics, you don't understand things. You just get used to them."

- Johann von Neumann

Course Description

Pre-calculus Math 40S is a course designed to prepare students for future university studies that will center around theoretical calculus disciplines. This course will focus on developing critical thinking skills in students, through the analysis of mathematical formulae and theorems.

Technology is a large component in the course, and students will be required to solve problems and model mathematical concepts with graphing calculators, spreadsheets, and other computer-based software.

It is required that all students come to class with a graphing calculator. If you do not have your own, you can rent one at the office with a \$75 insurance deposit.

Course Timeline

Unit 1: Functions

Unit 2: Transformation of Functions

Unit 3: Trigonometric Functions

Unit 4: Permutations & Combinations

Unit 5: Exponents and Logarithms

Unit 6: Trigonometric Identities

Unit 7: Binomial Theorem

Assessment

Course Work 70%

Final Exam 30 %

Due to the difficulty of this course, daily homework will be assigned. While it may not appear as a specific section in the assessment, the work done outside of class is necessary for success in this course. It is your responsibility to learn the material, and my job to help guide you through the required course content.

There is no midterm exam in this course. All students will be required to write the final exam, which will cover material from the entire semester. This is a provincial exam, and as such will require extensive review and study. It is my plan to take the last two weeks of class to prepare, which means a greater workload through the semester.

There are no supplemental exams.

Late Assignments – all assignments are due by the date set. Failure to do so will require you to talk to me outside of class time. I will accept assignments for assessment up to the date in which I hand the assignment back. After this date the incomplete assignment will receive a grade of 0, but may still require completion to satisfy the course requirements.

Textbook

McAskill, B. et al. 2012. Pre-Calculus 12. McGraw-Hill Ryerson, Whitby, ON.

Keys to Success...

- Be prepared for class
- Complete all assignments and questions prior to the due date
- Study for tests and exams
- Ask questions of others in class
- Come in for extra help when needed
- **Make Mistakes.** It helps you recognize when you're doing things right.