University of Toronto Scarborough Math & Stats Learning Centre Non-Credit Math Preparedness Course – Summer 2022

The only way to learn mathematics is to do mathematics - Paul Halmos

Welcome to the Online Mathematics Preparedness Course. This course is designed to help you review mathematical concepts that are foundational to understanding mathematics at University of Toronto Scarborough. The Online Mathematics Preparedness Course is a short, intensive online program supervised by UT Scarborough faculty that introduces the assignments, expectations and experiences that you will encounter in math courses. The Online Mathematics Preparedness Course can help you increase your confidence in preparation for university-level studies, and make a more successful transition from high school to university.

Students who receive 65% or higher in this noncredit course, can use this course as a prerequisite for MATA29, MATA30, or MATA32, and BIOA1H3 at UTSC.

We will be covering Modules 1-7 in this course. The rest of the modules will be made available to you, for your own learning, but you will not be responsible for knowing them for this course.

- 1. Name of the Instructor: Manaal Hussain
- 2. Contact Information: manaal.hussain@utoronto.ca

Virtual Office Hours: Friday 10-11 am

You may also contact me to schedule an appointment. Make sure to include OMPC in the subject line so that I prioritize these emails. I will respond to your questions within 24 hours (latest). Alternatively, you may post your question in the Discussion Board.

3. Marking Scheme: The grades will be distributed as follows:

• Quizzes – 32% (4 guizzes worth 8% each)

Participation – 10%
Surveys - 3%
Final Exam – 55%

If you are taking this course to meet the prerequisite, please note that you will need to pass this course with a grade of at least 65% and above, to be allowed to take UTSC calculus courses in Fall 2022 or later.

4. <u>Course Schedule (tentative)</u>: This course will cover 7 modules as follows. I suggest you carefully mark these dates on your calendar/agenda.

Dates	Module	Assessment Due
August 1	Module 1 – Algebraic Manipulations will be made available Module 2 – Equations and Inequalities will be made available	Quiz 1 — available on August 5th
August 3	Lecture 1 from 10-11 am	
August 6	Module 3 – Analytic Geometry will be made available	Quiz 2 — available on August 12th

August 10	Module 4 – Functions will be made available Lecture 2 10-11 am	
August 13	Module 5 – Compositions and Inverse Functions will be made available Module 6 – Trigonometry will be made available	Quiz 3 — available on August 19th
August 17	Lecture 3 10-11 am	
August 20	Module 7 – Trigonometric Functions will be made available	Quiz 4 – available on August
August 24	Lecture 4 10-11 am	25 th
August 26-28	Study period Review all modules. Practice questions and solutions will be posted for review	
August 29	Final Exam – covers Module 1-7	

Each module will be made available on the dates listed above (12:00 am). Each module includes short lesson videos followed by practice questions. While the solutions to the practice questions will be made accessible on Wednesday of each week, it is recommended that you attempt these questions first and then compare your solutions against the posted solutions. Each module will also include a Diagnostic test that you could take to test your understanding. Solutions to the diagnostic test will be made available on Wednesday of each week as well.

We will be going over more examples during lectures. Attendance is not mandatory, but highly encouraged. To ensure better performance on the Quizzes and other assessments, it is required that you watch all the videos; attend lectures, understand the concept and attempt the practice questions and the diagnostic test.

<u>Please note that the lectures will not be recorded, but I will upload a copy of the questions we covered during the lecture.</u>

- 5. Quizzes: Since we have students joining us from various time zones, all the quizzes will be made accessible from 11:00 am to 11:00 pm on the scheduled date. You will have an hour to complete the quiz; which you will complete in one sitting. You will not be able to save and come back to it another time. This will include a mix of multiple-choice questions, and questions requiring detailed solutions.
- 6. <u>Final examination</u>: Final exam will cover module 1-7. Like the quizzes, the final exam will include a mix of multiple-choice questions, and questions requiring detailed solutions. The exam will be made accessible from 11:00 am to 11:00 pm on the scheduled date. You will have 2.5 hours to complete the test; which you will complete in one sitting. Further information will be shared closer to the date.
 - Make sure to start the exam by 8:30 pm to have 2.5 hours to complete it. I recommend finding a spot with stable internet while attempting the quizzes and final examination.
- 7. <u>Surveys</u>: There will be 2-3 surveys sent to you as part of the course. More information will be shared during the course.
- 8. <u>Participation</u>: This course uses Quercus to post announcements, quizzes, lectures etc. We will also be using the Discussion Board for participation, which is graded and a mandatory part of the course. I will be introducing concepts on the discussion board and/or posting

- questions for you to think about and exchange ideas. Your participation will not be graded based on the right or wrong solution but the way you think about approaching the question.
- 9. <u>AssessAbility</u>: If you are learning needs and require alternate formats to the content, please connect with me so that we can discuss it further
- 10. Academic Integrity: We take academic honesty very seriously. Cheating and submitting exact solutions is considered an offense that can be penalized. It is the students' responsibility to ensure that they understand and demonstrate in each quiz how to approach and solve questions.
- 11. <u>Course Policy:</u> Since this is an online course, it is onto you to take ownership of your learning. While I will be providing with instructional support throughout the course, I trust you to follow the course structure (see above) and complete the assessments on time with honesty. Please note that any incidents of dishonesty will be dealt with its due severity and would impact your academic journey at UTSC.
 - Contact me a 2-3 days in advance of any valid commitments that might impact your ability to do the quizzes/tests on time. Only valid commitments will be entertained (summer job is not a valid excuse, since the assessments are open for 12 hours; nor is travel). For health related excuses, contact me right away.