# MATH1020E General Mathematics 2020-21 Term 1

#### Lecturer

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# **Teaching Assistants**

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#### Time and Venue

• Lecture: Wed 10:30am-11:15am; Fri 9:30-11:15am

• Tutorial: Wed 11:30am-12:15pm

• Conducted online using ZOOM. The meeting info is on Blackboard and emailed to you.

## **Course Description and Syllabus**

This course is designed to give students a solid foundation for learning calculus and other areas of mathematics in engineering. Topics include:

- Vectors
- Functions
- Polynomial and Rational functions
- Trigonometry
- Exponential and Logarithmic Functions
- Partial Fractions
- Series
- Binomial Theorem
- Probability
- Complex Numbers

#### **Lecture Notes**

Available on Blackboard and the course webpage.

#### Reference Books

- Precalculus: enhanced with graphing utilities by Michael Sullivan.
- Discrete Mathematics with Application by Susanna S. Epp.
- A First Course in Probability by Sheldon Ross.

#### **Assessment Scheme**

| Coursework (10 sets) | 8%  |
|----------------------|-----|
| Homework (4 sets)    | 4%  |
| WeBWorK (8 sets)     | 8%  |
| Midterm Exam (Nov 4) | 30% |

| Final Exam | 50% |
|------------|-----|

## **Important Dates**

- Sep 9: First day of class, no coursework, tutorial will be used for lectures
- Oct 2: Holiday, no class
- Oct 7: No coursework, tutorial will be used for lectures
- Nov 4. Midterm exam

#### **Midterm and Final Exams**

- Midterm exam will be held on Nov 4, 2020.
- The tentative exam period is Dec 9- Dec 23. The date of Final Exam is to be determined. Do not make travel arrangement before the date has been announced.

## **CUHK Blackboard**

We use the e-learning platform CUHK Blackboard (https://blackboard.cuhk.edu.hk/). You can find two courses, MATH1020 and MATH1020E after login. The former one is used for all the five sections A-E while the latter one is specific to our section E. Course materials are posted there. Please check Blackboard and email regularly for the latest announcements.

## **Tutorials and Coursework**

During tutorials, the lecturer and TAs can guide you to do coursework exercises and answer your questions. Coursework exercises are posted on Gradescope and due at 9pm on the same day.

## WeBWorK

WeBWorK is an online homework system. Eight WeBWorK problem sets will be given. The link is https://webwork.math.cuhk.edu.hk/webwork2/MATH1020\_202021T1/.

# Gradescope

Gradescope is an online platform for assignment submission and grading. It can be accessed through Blackboard. Both coursework and homework will be posted there. After you finish your work, scan or take pictures of it and upload the file to Gradescope.

# **Course Webpage**

Our course webpage (http://www.math.cuhk.edu.hk/~math1020) contains useful information about the course. The password for downloading materials is on Blackboard and emailed to you.

## MathGym

There are tutors answering your mathematics questions in MathGym. Appointments are available through its online booking system. See <a href="http://mathgym.math.cuhk.edu.hk/">http://mathgym.math.cuhk.edu.hk/</a> for details.