

**THE CHINESE UNIVERSITY OF HONG KONG**

**Department of Mathematics**

**MATH2020A** (Fall Term, 2020)

**Advanced Calculus II**

REMOTE TEACHING LECTURES M3,4, W4; TUTORIALS W3 OR W5

## **Introduction**

This is a continuation of MATH2010. In MATH2010 differentiation of functions of several variables is covered and now it comes to integration. We will go through double and triple integrals in rectangular and other coordinates, formulas of change of variables, vector analysis, line and surface integrals, Green's, Stokes' and divergence theorems.

The best way to learn this course is to drill on problems. There are plenty exercises in the text book. Although you are asked to hand in a few, even fewer in the days of pandemic, you should try as many as you can.

## **Instructor**

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## **Teaching Assistant**

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- Mr Chan Ki Fung
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## References

- Thomas' Calculus, 13th Ed., Global Edition, Pearson. (Text)
- James Stewart, Calculus - Multivariable Calculus, metric version 8E, CENGAGE Learning.
- Anton's Calculus - Early Transcendentals, Global Edition, Wiley.

## Grade

- 10% Assignments
- 40% Midterm Examination (TBA)
- 50% Final Examination (TBA)

## Assignment Policy

Problem sets will be assigned and deadline for submission will be posted. You must attend the tutorial classes where you work out and hand in additional exercises given by the tutors in class.

## Honesty in Academic Work

The Chinese University of Hong Kong places very high importance on honesty in academic work submitted by students, and adopts a policy of zero tolerance on cheating and plagiarism. Any related offence will lead to disciplinary action including termination of studies at the University. Although cases of cheating or plagiarism are rare at the University, everyone should make himself/herself familiar with the content of the following website:

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and thereby help avoid any practice that would not be acceptable.