THE CHINESE UNIVERSITY OF HONG KONG Department of Mathematics MATH2020A (Fall Term, 2021) Advanced Calculus II TEACHING LECTURES M34 (YC LIANG HALL 103), W4 (MONG ENG BUILDING 407); TUTORIALS W3 OR W5 (MONG ENG BUILDING 407)

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.

This course will be based on the lecture notes which are posted chapter by chapter, while the exercises are mainly taken from the text book.

The best way to learn this course is to drill on problems. There are plenty exercises in the text book which you should try as many as you can.

In addition to weekly assignments and exams, there are 3 quizzes to to held in tutorial classes.

Instructor

- Prof Kai-Seng Chou
- Contact information:
 - Office: Rm 223 LSB
 - Phone: 3943 7971
 - Email: kaisengchou@gmail.com, kschou@math.cuhk.edu.hk

Teaching Assistant

- Ms Yang, Yijin
- Contact information:
 - Office: AB1 614
 - Office Hours: Mon 15:00-17:00 pm; Tues 14:00-16:00 pm (or appointment)
 - Phone: 62260504
 - Email: yjyang@math.cuhk.edu.hk
- Ms Wang, Dan
- Contact information:
 - Office: AB1 505

- Office Hours: Mon-Wed 8:30-10:30am
- Phone: 39434298
- Email: dwang@math.cuhk.edu.hk

References

- Thomas' Calculus, 13th Ed., Global Edition, Pearson. (Text)
- Anton's Calculus Early Transcendentals, Global Edition, Wiley.

Grade

- 15% Assignments and quizzes
- 40% Midterm Examination (TBA)
- 45% 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 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:

http://www.cuhk.edu.hk/policy/academichonesty/

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