

Carleton U, School of Math & Stats
Differential Equations and Multivariable Calculus
BIT 2010-A -- ONLINE

Dr. R J Cova

Winter 2021

✎ E-MAIL: rcova@math.carleton.ca

✎ WEBSITE: <https://www.carleton.ca/culearn>

✎ LECTURES (asynchronous): Friday 8:35 - 11:35 h, via Culearn - Big Blue Button [BBB].

✎ CONSULTATION: Anytime by email – replies within 24 h.

✎ TUTORIALS: (from 22 January) Friday 12:05 - 12:55 h, Culearn - BBB. These highly beneficial tutorial classes will supplement the main lectures to enhance your training.

✓ Teaching Assistant (TA): ranfeijiang@cmail.carleton.ca

✎ TEXTBOOK: *CALCULUS, VOLUME 3*, by Gilbert Strang and Edwin Herman (OPENSTAX, 2016).

The online version of the book is freely available at <https://openlibrary.ecampusontario.ca>. Printed copies (not free) may be ordered at the foresaid site.

✎ GENERAL CONTENTS:

Curves and surfaces. Polar, cylindrical and spherical coordinates. Partial derivatives, gradients, extrema and Lagrange multipliers. Exact differentials. Multiple integrals. Integrals over surfaces. Line integrals. Green's Theorem, the Curl theorem, the Divergence Theorem. Applications.

- From the textbook: Selected sections from chapters I - VI.

✎ GRADING SCHEME:

Tests: 35 %. Assignments: 40 %. Final Exam: 25 %.

