



Mathematics 331

Multivariate Calculus

(see Course Descriptions for the applicable academic year: <http://www.ucalgary.ca/pubs/calendar/>)

Syllabus

<u>Topics</u>	<u>Number of Hours</u>
Systems of linear Ordinary Differential Equations	8
Functions of several variables, graphs and level curves, partial derivatives, differentiability and gradient, repeated partial derivatives The chain rule, the tangent plane, directional derivatives, example of Partial Differential Equations	9
Double integrals, repeated integrals, polar coordinates, standard version of Green's theorem, line integrals	6
Triple integrals, cylindrical and spherical coordinates	7
Vector fields, Gauss Theorem, Stokes theorem	6
TOTAL HOURS	36
