

Applied Mathematics 505

Calculus on Manifolds

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

*Syllabus*

<u>Topics</u>	<u>Number of Hours</u>
Calculus of Several Variables (Review)	2
Manifolds, Submanifolds, Bundles	3
Vector Fields, Lie transformation groups	8
Tensors, Differential forms	5
Calculus of forms	3
Lie derivative	3
Integration	6
Baby Morse theory OR Covariant Differentiation and Riemannian Geometry	6
<b>TOTAL HOURS</b>	<b>36</b>

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