

Introduction to differential geometry

1. Introduction: Gauss-Bonnet and deRham
2. DeRham cohomology
3. Smooth manifolds
4. Geometry of surfaces

Literature:

1. Madsen, I., Tornehave J.: From Calculus to Cohomology, 1997
2. Hicks: Differential Geometry, 1965
3. Do Carmo: Riemannian Geometry, 1992
4. Hirsch: Differential Topology, 1976
5. Spivak: A Comprehensive Introduction to differential geometry I-V, 1975