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Sommario/riassunto	This is a free translation of a set of notes published originally in Portuguese in 1971. They were translated for a course in the College of Differential Geome- try, ICTP, Trieste, 1989. In the English translation we omitted a chapter on the Frobenius theorem and an appendix on the nonexistence of a complete hyperbolic plane in euclidean 3-space

(Hilbert's theorem). For the present edition, we introduced a chapter on line integrals. In Chapter 1 we introduce the differential forms in  $\mathbb{R}^n$ . We only assume an elementary knowledge of calculus, and the chapter can be used as a basis for a course on differential forms for "users" of Mathematics. In Chapter 2 we start integrating differential forms of degree one along curves in  $\mathbb{R}^n$ . This already allows some applications of the ideas of Chapter 1. This material is not used in the rest of the book. In Chapter 3 we present the basic notions of differentiable manifolds. It is useful (but not essential) that the reader be familiar with the notion of a regular surface in  $\mathbb{R}^3$ . In Chapter 4 we introduce the notion of manifold with boundary and prove Stokes theorem and Poincaré's lemma. Starting from this basic material, we could follow any of the possible routes for applications: Topology, Differential Geometry, Mechanics, Lie Groups, etc. We have chosen Differential Geometry. For simplicity, we restricted ourselves to surfaces.

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