



GEOMETRIA A - L

MAT/03 - 9 CFU - 2° Semester

Teaching Staff

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LEARNING OBJECTIVES

Basic knowledge of linear algebra and geometry

DETAILED COURSE CONTENT

Geometric vectors in the plane and space- Vector spaces, subspaces and operations with them-Matrices, determinants and linear systems and their properties- Linear functions and their properties - Eigenvalues and eigenvectors of an endomorphisms- Diagonalization of an endomorphism- Bilinear forms, real scalar products- Symmetrical endomorphisms - Spectral theorem and its corollaries-

Linear geometry in the plane and space - Conic, invariants orthogonal- classification affine of conic non-degenerate-polarity- Quadrics degenerate and non- degenerate - Cones and cylinders- Classification affine of quadrics non degenerate-Tangent lines and tangent planes for a quadric- Plane sections of irreducible quadrics.

TEXTBOOK INFORMATION

Lezioni di Algebra lineare e geometria Greco-Valabrega.
