ID	3622
Curricular Unit	Mathematics II
Regent	Ana Maria Fité Alves Diniz
Learning Outcomes	(i) To provide students with complementary mathematical tools at the level of Linear Algebra and Mathematical Analysis, necessary for other subjects; (ii) To develop in students logical thinking, fundamental for scientific studies; (iii) To pass on to students the relevance of mathematics in eventual areas of interest, both for their studies and for their professions.
Syllabus	1. Complements of linear algebra 1.1. Determinants 1.2. Eigenvalues and eigenvectors 2. Functions of several variables 2.1. Partial derivatives 2.2. Extremes 3. Linear differential equations 3.1. First order equations 3.2. Second order equations with constant coefficients
Evaluation	Teaching methodology: Classes operate on a theoretical-practical level to ensure students that the practical component is always present. In general, together with the theoretical exposition of each subject a practical illustration is made with real situations. Assessment: Four or five mini-tests during term time plus a final test or Final exam. The final grade in the course is obtained via a process which may be seen in http://www.fmh.ulisboa.pt/pt/doc/1o-ciclo/desciplinas/2766-metodos-de-avaliacao-matematica/file
Bibliography	Ferreira, J. Campos. Introdução à Análise Matemática, Fundação Calouste Gulbenkian, Lisboa. Apostol, Tom M. Calculus, Blaisdell Publishing Company, Massachusetts.