

<b>ID</b>	2577
<b>Curricular Unit</b>	Mathematics II
<b>Regent</b>	Maria Margarida de Oliveira Moz Carrapa
<b>Learning Outcomes</b>	Providing solid bases for learning of linear algebra; differential calculus in $R^n$ , as well as optimization of functions of several variables.
<b>Syllabus</b>	<p>Matricial calculus:            Vectors and matrices.            Determinants and matrix inversion.            Linear Independence of vectors and linear systems of equations.            Differential calculus in :            Partial derivatives.            Quadratic forms.            Derivatives of functions defined implicitly.            Multivariable optimization:            Unconstrained optimization.            Constrained optimization.</p>
<b>Evaluation</b>	Theoretical-practical lectures, and sessions for discussing problems. The assessment consists in a written individual examination (70% of the final grade, subject to a minimum score) and written intercalary tests (30% of the final grade).
<b>Bibliography</b>	Sydsaeter, Knut and Peter Hammond, (1995). Essential Mathematics for Economic Analysis, Prentice Hall.