| ID | 2949 |
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| Curricular Unit | Mathematics II |
| Regent | Maria Margarida de Oliveira Moz Carrapa |
| Learning OutcomesProviding solid bases for learning of linear algebra; differential calculus in <br> Rn, as well as optimization of functions of several variables. <br> Matricial calculus: <br> Vectors and matrices. <br> Determinants and matrix inversion. <br> Linear Independence of vectors and linear systems of equations. <br> Differential calculus in : <br> Partial derivatives. <br> Quadratic forms. <br> Derivatives of functions defined implicitly. <br> Multivariable optimization: <br> Unconstrained optimization. <br> Constrained optimization. |  |
| Syllabus | Theoretical-practical lectures, and sessions for discussing problems. The <br> assessment consists in a written individual examination (70\% of the final <br> grade, subject to a minimum score) and written intercalary tests (30\% of <br> the final grade). |
| Evaluation | Sydsaeter, Knut and Peter Hammond, (1995). Essential Mathematics for <br> Economic Analysis, Prentice Hall. |
| Bibliography |  |

