

Code: 1645 Mathematical Analysis**Degree:** all 1st cycles, except Landscape Architecture**Curricular Year:** 1st**Credits:** 6 ECTS**Language:** Portuguese/English**Responsible:** Jorge Orestes Lasbarrères Cerdeira**Other lecturer(s):** Ana Isabel Boavida de Carvalho Mesquita, Isabel Maria de Jesus Martins, Jorge Filipe Campinos Landerset Cadima, Maria Emília Rodrigues Ferreira Pinto, Maria Isabel Varejão de Oliveira Faria, Maria João Teixeira Martins and Pedro Cristiano Santos Martins da Silva**Web Site:** <http://www.isa.utl.pt/home/node/3946>**Semester Course:** 2nd
Compulsory**1. Contact hours:****Lecture/Practicals 70 Others 14 Total 84****2. Objectives:**

Comprehension of the main concepts from Differential and Integral Calculus, development of skills on calculus, improving mathematical maturity

3. Programme:

Differential calculus, antiderivatives, definite and improper integrals.

Differential equations.

Differential calculus and extremes values of functions of more than one variable. Double integrals.

4. Bibliography:**Main Bibliography**Text available at http://www.isa.utl.pt/dm/analise_mat/analise_mat/index.html**Other Bibliography**William F. Trench, Introduction to Real Analysis, Pearson Education, 2003 ([Free Download](#)).Kenneth Kuttler, Calculus, Applications and Theory, [FreeTechBooks.com](#), 2008.**5. Assessment:**

Tests and/or final exams

6. Estimated Workload:

168	Hours
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7. Last Update:

25/2/2011
