



UNIVERSITÀ DI PAVIA

Anno Accademico 2016/2017

NUMERICAL ANALYSIS 2	
Enrollment year	2015/2016
Academic year	2016/2017
Regulations	DM270
Academic discipline	
Department	DEPARTMENT OF MATHEMATICS "FELICE CASORATI"
Course	MATHEMATICS
Curriculum	PERCORSO COMUNE
Year of study	2°
Period	2nd semester (01/03/2017 - 09/06/2017)
ECTS	6
Lesson hours	56 lesson hours
Language	Italian
Activity type	ORAL TEST
Teacher	BOFFI DANIELE (titolare) - 6 ECTS
Prerequisites	First year Calculus courses and the contents of the course "Algebra lineare". First year "Analisi Numerica 1".
Learning outcomes	The course will give a broader overview of basic concepts of Numerical Analysis and Scientific Computing, so that the students can classify problems and the numerical algorithms suitable for their solution. The course has a theoretical part as well as some Lab classes which take place at the Computer Lab of the Math Department.
Course contents	1) Approximation of functions and data. 2) Non linear equations and optimization. 3) Numerical integration. 4) Approximation of ordinary differential equations.
Teaching methods	Lectures, exercises, and Labs.

**Recommeneded or required
readings**

A. Quarteroni, R. Sacco, F. Saleri, P. Gervasio. Matematica numerica,
ed. Springer (collana UNITEXT)

Written and oral exam. Lab report.

