



### NUMERICAL ANALYSIS 2

<b>Enrollment year</b>	2015/2016
<b>Academic year</b>	2016/2017
<b>Regulations</b>	DM270
<b>Academic discipline</b>	
<b>Department</b>	DEPARTMENT OF MATHEMATICS "FELICE CASORATI"
<b>Course</b>	MATHEMATICS
<b>Curriculum</b>	PERCORSO COMUNE
<b>Year of study</b>	2°
<b>Period</b>	2nd semester (01/03/2017 - 09/06/2017)
<b>ECTS</b>	6
<b>Lesson hours</b>	56 lesson hours
<b>Language</b>	Italian
<b>Activity type</b>	ORAL TEST
<b>Teacher</b>	BOFFI DANIELE (titolare) - 6 ECTS
<b>Prerequisites</b>	First year Calculus courses and the contents of the course "Algebra lineare". First year "Analisi Numerica 1".
<b>Learning outcomes</b>	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.
<b>Course contents</b>	<ol style="list-style-type: none"><li>1) Approximation of functions and data.</li><li>2) Non linear equations and optimization.</li><li>3) Numerical integration.</li><li>4) Approximation of ordinary differential equations.</li></ol>
<b>Teaching methods</b>	Lectures, exercises, and Labs.

**Reccomended or required  
readings**

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



Written and oral exam. Lab report.

## Further information

