Anno Accademico 2014/2015

MATHEMATICS (SURNAMES A-K)	
Enrollment year	2014/2015
Academic year	2014/2015
Regulations	DM270
Academic discipline	MAT/05 (MATHEMATICAL ANALYSIS)
Department	DEPARTMENT OF BIOLOGY AND BIOTECHNOLOGY "LAZZARO SPALLANZANI"
Course	BIOLOGICAL SCIENCES
Curriculum	PERCORSO COMUNE
Year of study	1°
Period	(01/10/2014 - 14/01/2015)
ECTS	6
Lesson hours	48 lesson hours
Language	ITALIAN
Activity type	ORAL TEST
Teacher	BOFFI DANIELE - 6 ECTS
Prerequisites	=
Learning outcomes	=
Course contents	Analytic geometry in the plane: lines, conics. Set theory: natural, integer, real numbers. Growth rate; arithmetic and geometric progressions, sequences. Mean and median values. Use of percentages. Concept of function: domain, image space, sign. Elementary functions: powers, polynomials, trigonometric functions, logarithms and exponentials. Logarithmic scales. Limits of sequences and of functions. Continuous functions and their basic properties. Discontinuities. Concept of derivative; geometrical and physical interpretation. Tangent line. Monotone, concave, convex functions. Minima, maxima and inflection points. Fundamental theorems of differential calculus. Study of a function of one real variable. Taylor polynomials. De L'Hopital's rule.

	Integrals. Integration by parts and by substitution.
Teaching methods	=
Reccomended or required readings	=
Assessment methods	=
Further information	=
Sustainable development goals - Agenda 2030	$lbl_legenda_sviluppo_sostenibile