



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Matematica e Informatica		
ACADEMIC YEAR	2018/2019		
MASTER'S DEGREE (MSC)	MATHEMATICS		
SUBJECT	HISTORY OF MATHEMATICS		
TYPE OF EDUCATIONAL ACTIVITY	B		
AMBIT	50398-Formazione teorica avanzata		
CODE	07008		
SCIENTIFIC SECTOR(S)	MAT/04		
HEAD PROFESSOR(S)	CERRONI CINZIA	Professore Ordinario	Univ. di PALERMO
OTHER PROFESSOR(S)			
CREDITS	6		
INDIVIDUAL STUDY (Hrs)	102		
COURSE ACTIVITY (Hrs)	48		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	1		
TERM (SEMESTER)	2° semester		
ATTENDANCE	Not mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	CERRONI CINZIA Monday 15:00 17:00 Dipartimento di Matematica e Informatica Stanza 105 Wednesday 12:30 14:00 Dipartimento di Matematica e Informatica Stanza 105 Thursday 12:30 14:00 Dipartimento di Matematica e Informatica Stanza 105		

DOCENTE: Prof.ssa CINZIA CERRONI

PREREQUISITES	No prerequisites.
LEARNING OUTCOMES	Knowledge of the development of the mathematical thinking, in particular the development of the history of geometry from Euclid to Hilbert. Ability to collocate historically a mathematical subject. Ability to communicate, even to non-specialists, the history of the mathematical thinking. Ability to understanding an ancient book.
ASSESSMENT METHODS	<p>Oral examination. Marks (or grades) are expressed in thirties.</p> <p>There is an intermediate nonobligatory examination in the form of a seminar. The interview will begin with a subject of one's choice and will continue with two or three questions on the whole examination program. The intermediate seminar will compete for the final evaluation.</p> <p>We use the following Assessment Scheme:</p> <p>Insufficient: the student does not have an acceptable knowledge of the topics.</p> <p>18-20: The student has a general knowledge and understanding of the topics; he has just adequate communication skills.</p> <p>21-23: The student has an adequate knowledge and understanding of the topics; he has satisfactory communication skills.</p> <p>24-26: The student has a fair knowledge and understanding of the topics; he has a decent communication skills.</p> <p>27-29: The student has a good knowledge and understanding of the topics; he has a good communication skills.</p> <p>30-30 cum laude: The student has an excellent knowledge and understanding of the topics; he has an excellent communication skills.</p>
EDUCATIONAL OBJECTIVES	The main objective is to know the conceptual and epistemological foundations of modern mathematics, examining them from the point of view of their historical development.
TEACHING METHODS	Lessons
SUGGESTED BIBLIOGRAPHY	<p>Kline, Storia del pensiero matematico, Einaudi, 1999</p> <p>Altri testi di consultazione</p> <p>Gli Elementi di Euclide, edizioni UTET, 1999.</p> <p>La Geometria di Cartesio, edizioni UTET, 1999</p> <p>I Fondamenti della Geometria di Hilbert, Feltrinelli, Milano, 1970</p> <p>P. Nastasi, A. Scimone, Da Euclide a Goldbach. Storia di uomini e di numeri. Pietro Vittorietti Edizioni, 2001</p> <p>E. Giusti, Piccola Storia del Calcolo Infinitesimale, dall'antichita' al Novecento. Ist. Editoriali e Poligrafici, 2007.</p>

SYLLABUS

Hrs	Frontal teaching
6	Euclid's Elements.
6	Cartesian Geometry
6	Non Euclidean Geometry
8	The Foundation of Geometry of Hilbert
8	History of Number Theory and History of Cryptography
4	History of Mathematics Teaching
8	History of the origins of the Infinitesimal Calculus
2	Historical Sketch on Circolo Matematico di Palermo