LOGO DELLA STRUTTURA PRIMARIA

COURSE: Complements of Geometry			
ACADEMIC YEAR:2018/2019			
TYPE OF EDUCATIONAL ACTIVITY: Basic			
TEACHER: Gabor Korchmaros			
e-mail: gabor.korchmaros@unibas.it		website:	
phone: 0971205839		mobile (optional): 3204238192	
Language: italian			
ECTS: (lessons and tutorials/practice) 6	n. of hours: (lessons and tutorials/practice) 48	Campus: Potenza Department of Mathematics, Informatics and Economics Program: lauera triennale	Semester: first

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

"Complements of Geometry" is an introductory course on fundamentals of the theory of plane algebraic curves defined over a field. A specific objective is to show the interaction between algebra and geometry. The course also serves for the students to improve their expository skills and get used to arguing rigorously in the proofs.

PRE-REQUIREMENTS Geometry I and Geometry II.

SYLLABUS Symmetric functions, Sylvester resultant, elimination theory, fundamentals on plane algebraic curves, intersection multiplicity, Bézout's theorem, linear branches, pencil of curves, Bertini's theorem, polar curves, Hessian curves, Plücker's formulas, plane cubics

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TEACHING METHODS

Theoretical lessons with Classroom tutorials,

EVALUATION METHODS

Written examination, Oral examination.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

Notes distributed during the course,

books: G. Vaccaro: Elementi della teoria delle curve e superficie, Libreria Eredi Virgilo Veschi, Roma , J.W.P. Hirschfeld, G. Korchmáros, F. Torres, Algebraic curves over a finite field, Princetone University Press, 2008. first two chapters

INTERACTION WITH STUDENTS Frontal, tutorial by emails also in English.

EXAMINATION SESSIONS (FORECAST)[1] 2018

January 16, 23, 30 February 4, 11, 25, June 13 July 3, 11, 24 September 12 26

SEMINARS BY EXTERNAL EXPERTS Yes within the ERASMUS program □

FURTHER INFORMATION

[1] Subject to possible changes: check the web site of the Teacher or the Department/School for updates.