COURSE NAME	Introduction to projective geometry					
Code	PMM121	Year of study	2nd year of graduate study			
Course teacher	Joško Mandić	Credits (ECTS)	5,0			
Associate teachers		Type of instruction (number of hours)	L	S	E	
			30		30	
Status of the course	Elective	Percentage of application of e-learning	0			

COURSE DESCRIPTION	
Course objectives	The aim of the course is to acquaint students with various concepts of the theory of projective geometry. The emphasis is on gaining theoretical knowledge and skills in problem solving in the field of projective planes. Also, the notion of projective plane generalizes to concepts of finite projective planes and projective space.
Course enrolment requirements and entry competences required for the course	Requirements: Course passed: Introduction to Mathematics. Required competences: basic knowledge of geometry.
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Student is able to: -define projective plane -explain different projective mappings -analyse conics in projective planes -apply aquired knowledge from the projective plane to a projective space
Course content broken down in detail by weekly class schedule (syllabus)	-Axioms of projective planes (2) -Principle of duality (2) -Desargues theorem (2) -Perspective and projections (2) -Fundamental theorem of projective geometry (2) -Projective collineation (2) -Polarity (2) -Conics (2) -Steiners and Pascals theorem (2) -Projections and involutions on conics (2) -Coordinatisation of lines and planes (2) -Cross-ratio (2) -Analytic geometry in projective planes (2) -Finite projective planes (2) -Projective space (2)
Format of instruction	Lectures, seminars and exercises
Student responsibilities	Attending classes, writing seminar paper and homework assignments
Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS*	Attending classes, writing seminar paper and homework assignments: 2 ETCS. Written exam: 1 ETCS. Oral exam: 2 ETCS.

value of the course)	
Grading and evaluating student work in class and at the final exam	Written and oral exam
Required literature (available in the library and via other media)	D. Palman, *Projektivna geometrija*, Školska knjiga, Zagreb, 1984.
Optional literature (at the time of submission of study programme proposal)	H. S. M. Coxeter, *Projektivna geometrija*, Školska knjiga, Zagreb, 1982.
Quality assurance methods that ensure the acquisition of exit competences	Statistics of test results and student evaluation via anonymous questionnaires at the end of the course. The survey is conducted according to the rules of the University of Split.
Other (as the proposer wishes to add)	