Study programmes: Doctoral studies – Mathematics – Probability and statistics			
Course name: Coding theory			
Lecturers: Jelena Jocković, Pavle Mladenović, Marko Obradović			
Status: Optional			
ECTS: 9			
Attendance prerequisites: none			
Course aims: Acquiring general and specific knowledge concerning codding theory.			
Course outcome: Upon completing the course, a student is capable of applying the acquired knowledge and conducting individual scientific research in this field.			
Course content: Noiseless coding. Discrete memoryless channels. Error correcting codes. Further theory of error correcting codes. Channels with memory. Continuous channels.			
Literature: **R.B. Ash:** ***Information Theory,*** Dover Publications, New York, 1990. **P. Billingsley*, Ergodic Theory and Information***, John Wiley & Sons, New York, 1965.			
Number of hours : 10	**Lectures**: 4	**Research:** 6	
Teaching and learning methods: Frontal / Individual			
Assessment (maximal 100 points)			
Course assignments	points	**Final exam**	points
homework	20	Written exam	
Exercises / Tutorials		Oral exam	60
Colloquia			
Essay	20		