

Study programmes: PhD studies – Mathematics				
Course name: Selected topics of the theory of stochastic processes				
Lecturers: Milan Merkle				
Status: Optional for the module Statistics, actuarial and financial mathematics				
ECTS: 8				
Attendance prerequisites: Stochastic processes, Probability theory				
Course aims: Introduction to specific concepts of the theory of stochastic processes, especially significant in the fields of actuarial and financial mathematics.				
Course outcome: Upon completion of the course, student is familiar with specific contents of the field of stochastic processes and their significance in the study of probability and statistical models that are particularly used in actuarial and financial mathematics.				
Course content: It is determined in agreement with the lecturer and in accordance with the complete program of graduate academic studies.				
Literature: 1. Jovan Mališić: <i>Slučajni procesi</i> , Građevinska knjiga, Beograd, 1985. 2. S. Resnick: <i>Adventures in Stochastic Processes</i> , Birkhauser, Boston, 1994.				
Number of hours: 7	Lecures: 3	Tutorials: 4	Laboratory: -	Research: -
Teaching and learning methods: Frontal / Lectures / Exercises				
Assessment (maximal 100 points)				
Course assignments	points	Final exam	points	
Lectures	-	Written exam	-	
Exercises / Tutorials	10	Oral exam	-	
Colloquia	40	Written-oral exam	40	
Essay / Project	10			