

Study programmes: Master studies – Mathematics			
Course name: Life insurance			
Lecturers: Pavle N. Mladenović			
Status: Optional for the module Statistics, actuarial and financial mathematics			
ECTS: 8			
Attendance prerequisites: Probability theory, Stochastic processes, Mathematical Statistics			
Course aims: Acquiring of general and specific knowledge in life insurance mathematics.			
Course outcome: Upon completion of the course, student has basic knowledge of a compound interest calculus and stochastic models used in mathematics of life insurance, types of insurance and their mechanisms.			
Course content: Mathematics of a compound interest. Stochastic models in life insurance mathematics. The future lifetime after a certain period of life. Types of life insurance. Annuities. Insurance premiums. The total claim amount in a portfolio and normal approximation.			
Literature: Hans U. Gerber (1997): <i>Life Insurance Mathematics</i>, Springer.			
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		