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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Faculty of Economics | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | **Economics** | | |
| Study Module (if applicable) | | | | Finance, Banking and Insurance | | |
| Course title | | | | Actuarial Modelling | | |
| Level of study | | | | Bachelor  Master’s  Doctoral | | |
| Type of course | | | | Obligatory  Elective | | |
| Semester | | | | Autumn Spring | | |
| Year of study | | | | First | | |
| Number of ECTS allocated | | | | 5 | | |
| Name of lecturer/lecturers | | | | Žarko Popović | | |
| Teaching mode | | | | Lectures Group tutorials  Individual tutorials  Laboratory work  Project work  Seminar  Distance learning  Blended learning  Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| *This course is designet such taht students, who have mastered the basices of insurance, get acquainted with mathematical and statistical concepts and models which are used in the insurance, both life and non life insurance.*  *After considerations and mastering the contents of this course, students can independently analyze all issues and solve problems in mathematics of insurance at a higher scientific level. The adopted theoretical knowledge applied in real life insurance of persons and property insurance.* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| *1. Introduction, 2. The basic elements of the theory of probability, 3. Random variables and expection of statistical events, 4. Probability of survival, 5. Binomial distribution and the law of large numbers, 6. Analytical models of life insurance, 7. Discrete models of life insurance, 8. Continuous models of life insurance, 9. A single premium of life insurance, 10. The annual premium of life insurance, 11. The basic mathematical models of non-life insurance, 12. The general characteristics of the data of life and non-life insurance* | | | | | | |
| **LANGUAGE OF INSTRUCTION** | | | | | | |
| Serbian (complete course)  English (complete course)  Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)  Serbian with English mentoring Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | |
| **ASSESSMENT METHODS AND CRITERIA** | | | | | | |
| **Pre exam duties** | **Points** | | **Final exam** | | | **points** |
| **Activity during lectures** | **30** | | **Written examination** | | |  |
| **Practical teaching** | **20** | | **Oral examination** | | | **50** |
| **Teaching colloquia** |  | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |