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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Science and Mathematics |
| **GENERAL INFORMATION** |
| Study program  | **Mathematics** |
| Study Module (if applicable) | Probability, statistics and financial mathematics |
| Course title | Actuarial mathematics |
| Level of study | ☐Bachelor x Master’s ☐ Doctoral |
| Type of course | x Obligatory ☐ Elective |
| Semester  | ☐Autumn xSpring |
| Year of study  | I |
| Number of ECTS allocated | 7.5 |
| Name of lecturer/lecturers | Prof. dr Marija Milošević |
| Teaching mode |  xLectures ☐Group tutorials ☐ Individual tutorials ☐Laboratory work ☐ Project work ☐ Seminar ☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *The purpose of this course is to provide the student with the opportunity to get knowledge of the life insurance mathematics. Students should be able to apply the knowledge in actuarial practice.*  |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| *Basic concepts of insurance.* *Discrete and continuous payments, present and future values.* *Future lifetime modelling: distribution function, survival function, the force of mortality, some mortality laws, mortality tables, the curtate future lifetime.**Elementary insurance types: whole life insurance, term insurance, endowment, deferred life insurance.**General types of life insurance and life annuities.**Net premiums: equivalence principle, reserves, total loss of the insurance company.*  |
| **LANGUAGE OF INSTRUCTION** |
| xSerbian (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** |  | **Written examination** | **35** |
| **Practical teaching** |  | **Oral examination** | **35** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |