Incoming student mobility

UNIOS University Unit: DEPARTMENT OF MATHEMATICS

COURSES OFFERED IN FOREIGN LANGUAGE FOR ERASMUS+ INDIVIDUAL INCOMING STUDENTS

Department or Chair within the UNIOS Unit	Department of Mathematics
Study program	Graduate university study programme in mathematics (Master level) Branch: • Financial Mathematics and Statistics-obligatory
Study level	Graduate (master)
Course title Course code (if any)	Credit Risk Management
Language of instruction	English
Brief course description	 Syllabus. Credit risk definition. Traditional credit analysis. Financial analysis of loan application. Shortcomings of traditional credit analysis. Project assignment. Credit risk models based on the accounting data and market value. Characteristics of credit risk models. The reasons for using credit risk models. Some of the known credit risk models: Altman z-score, ZETA, Ohlson, EDF model. The use and application of credit scoring models. Principles of credit risk model development. Validation of credit scoring/rating models. Types of credit scoring models. Statistical methodology in credit risk model development. Development of the scoring model using a data set from the bank. Validation of the developed models by using appropriate tests. Retail credit scoring models. Characteristics of retail scoring models. Application of models. Accuracy of models. Most frequently used methods in developing retail scoring models. Key variables in retail scoring models. Credit scoring models for small and medium enterprises. Specifics of credit scoring models for small and medium enterprises. Reasons for using credit scoring models for small and medium enterprises. Problems in developing credit scoring

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	 models for small and medium enterprises. Key variables in credit scoring models for small and medium enterprises. 6. Basel 2. Capital adequacy of credit institutions. Treatment of credit risk. Standardized approach. An approach based on internal rating models.
Form of teaching	Consultative teaching.
Form of assessment	The grade is formed as the average score based on the following grades: (i) activities in solving practical problems and tasks, (ii) homework, (iii) 2 project tasks, whereby the first project task refers to the classic credit analysis and the second project to development and validation of credit scoring models, (iv) evaluation of 3 mid-term exams. The last mid-term exam covers teaching materials from previous mid-term exams, and as such it represents the final exam of the course.
Number of ECTS	4
Class hours per week	2+0+2
Minimum number of students	
Period of realization	Summer semester
Lecturer	Nataša Šarlija