## Incoming student mobility

UNIOS University Unit: SCHOOL OF APPLIED M ATHEM ATICS AND INFORM ATICS

## COURSES OFFERED IN FOREIGN LANGUAGE FOR ERASMUS+INDIVIDUAL INCOM ING STUDENTS

| Department or Chair within the | School of Applied Mathematics and Informatics |
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| UNIOS Unit |  |


| Study program | Graduate university study programme in mathematics (Master <br> level) <br> Branches: <br> $\bullet \quad$ Financial Mathematics and Statistics |
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| Study level | Graduate (master) |
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| Course title | Current Topics in Statistics |
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| Course code (if any) | M 126 |
| Language of instruction | English |
| Brief course description | Syllabus. <br> Each year, several topical topics are selected that are considered from the aspect of application in other sciences. Topics are selected from the list below or new ones are defined. <br> 1. Bayesian statistical inference and applications. <br> 2. Methods of resampling and application (Jackknife, Bootstrap). <br> 3. High-dimensional statistics <br> 4. Survival analysis <br> 5. Restricted estimation <br> 6. Multi-equation regression models (instrumental variable, twophase least squares method) <br> 7. Panel data analysis <br> 8. Non-parametric methods in regression <br> 9. Nonlinear Econometric M odels |
| Form of teaching |  |
| Form of assessment | Lectures and seminars are obligatory. During the course, statistical software will be used (e.g. R). The final exam is oral, and it is taken after the lectures have been completed, the exercises completed, the minimum number of credits at the midterm examinations, and the completed and defended seminar work. Student may write homework during the course to improve their final grade. |


| Number of ECTS | $\mathbf{5}$ |
| :--- | :--- |
| Class hours per week | $\mathbf{2 + 0 + 2}$ |
| Minimum number of students |  |
| Period of realization | Summer semester |
| Lecturer | Ivan Papić |

