<table>
<tr><td colspan="2">NAME OF THE COURSE</td><td colspan="5">Statistical methods</td></tr>
<tr><td>Code</td><td>EUBC02</td><td>Year of study</td><td colspan="4">1</td></tr>
<tr><td>Course teacher</td><td>Prof Snježana Pivac, PhD, Assistant Prof Tea šestanović, PhD</td><td>Credits (ECTS)</td><td colspan="4">5</td></tr>
<tr><td>Associate teachers</td><td>Marija Vuković, mag.oec., Karmen Vrhar, mag.oec.</td><td rowspan="2">Type of instruction (number of hours)</td><td>L</td><td>S</td><td>E</td><td>F</td></tr>
<tr><td></td><td></td><td>26</td><td></td><td>26</td><td></td></tr>
<tr><td>Status of the course</td><td>Optional</td><td>Percentage of application of e-learning</td><td colspan="4">30%</td></tr>
<tr><td colspan="7">COURSE DESCRIPTION</td></tr>
<tr><td>Course objectives</td><td colspan="6">The main aim of the course is to ensure the acquisition of knowledge and skills to select the appropriate statistical methods, their implementation and conclusion in economic research. Students will master the relevant statistical methods those they will be able to use in economic research.</td></tr>
<tr><td>Course enrolment requirements and entry competences required for the course</td><td colspan="6">Course signature requirements: as determined by the Statute of the Faculty of Economics and Rules and Regulations for Studies and Study Programmes.</td></tr>
<tr><td>Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="6">Learning outcome of the subject:
To conclude about the research-scientific hypotheses based on the designed the survey research, selection of relevant sample and testing of the statistical hypotheses as well as estimated and validated statistical models.

Specific learning outcomes:
1. To select the relevant and representative sample according to the research objective
2. To create the database from the secondary and/or primary sources based on the created questionnaire and the research hypotheses
3. To select relevant statistical test and the method to conclude about the research hypotheses
4. To conclude about appropriate research hypotheses those are set up in accordance with economic theory and practice, using selected statistical hypotheses testing
5. To validate the appropriate statistical model with qualitative and/or quantitative variables according to the research objectives
6. To conclude about the interdependence between observed variables based on the estimated and tested statistical model</td></tr>
<tr><td>Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6"><table>
<tr><td colspan="2">Lectures</td><td colspan="2">Exercises</td></tr>
<tr><td>Topic</td><td>Hours</td><td>Topic</td><td>Hours</td></tr>
<tr><td>Variables defining and measurement. Software support for the application of statistical methods in specific analyzes.</td><td>2</td><td>Variables defining and measurement. Software support for the application of statistical methods in specific analyzes.</td><td>2</td></tr>
<tr><td>Sample.</td><td>1</td><td>Sample.</td><td>1</td></tr>
<tr><td>Statistical research and survey design.</td><td>1</td><td>Statistical research and survey design.</td><td>1</td></tr>
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	Independent samples hypothesis testing.	2	Independent samples hypothesis testing.	2
	Hypothesis testing the independence between nominal variables.	2	Hypothesis testing the independence between nominal variables.	2
	Hypothesis testing about the distribution.	1	Hypothesis testing about the distribution.	1
	Related samples hypothesis testing	2	Related samples hypothesis testing	2
	Selected nonparametric tests.	2	Selected nonparametric tests.	2
	Cluster analysis.	2	Cluster analysis.	2
	Analysis of the impact of nominal factor(s) on numeric variable.	1	Analysis of the impact of nominal factor(s) on numeric variable.	1
	Multiple regression. Methods of selection variables in regression model.	2	Multiple regression. Methods of selection variables in regression model.	2
	Regression modeling in conditions of unfulfilled basic assumptions.	2	Regression modeling in conditions of unfulfilled basic assumptions.	2
	Dummy variables.	2	Dummy variables.	2
	Seasonality analysis.	2	Seasonality analysis.	2
	Business forecasts.	2	Business forecasts.	2

Format of instruction	☑ lectures ☐ seminars and workshops ☑ exercises ☐ *on line* in entirety ☑ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☑ work with mentor ☐ (other)
Student responsibilities	Students are required to actively participate in classes during lectures and exercises, with the attendance of minimum 50%. Additionally, students' activity will be monitored through self-evaluation quizzes that will be available to students on the course websites within the Moodle platform. In case the student takes less than two self-evaluation quizzes during the semester, the student will be denied a signature. The condition for taking the exam is a signature.	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	2 ECTS	Research		Practical training	
	Experimental work		Report		Computer aided test	1,5 ECTS*
	Essay		Seminar essay	1,5 ECTS*	Test	1 ECTS**
	Tests		Oral exam	1 ECTS**	Self-evaluation quizzes	0,5 ECTS
	Written exam	1,5 ECTS*	Project		(Other)	

Grading and evaluating student work in class and at the final exam	1. Tests during classes. 2. Research/Seminar essay during classes or exam period. 3. Exam: written (Computer aided exam) and oral. The exam consists of written and oral part. The condition for taking all the tests is that the student has solved at least one of the self-evaluation quizzes from the part of the material that is evaluated by the test. Exercises are performed on a computer in the SPSS software and other appropriate softwares.

	Exam: written exam and/or seminar essay and oral exam. A positive assessment from the written exam and/or the seminar essay is a precondition for passing the oral exam. During the semester, two tests will be organized (the computer aided tests). Additional requirement for the second test is the positive assessment from the first test. Alternatively, students can pass a written exam by written exam and/or seminar essay during the exam period. * The student who pass the first and the second computer aided test does not need to write a written exam and/or seminar essay. ** During the semester the two tests will be organized as an alternative to the oral exam. Additional requirement for the second test the positive assessment from the first test. The overall grade represents the mean (positive) scores achieved on both tests. Students can pass the oral exam during the exam period. A student who achieves a positive assessment from the first and second tests does not have to go to the oral exam. Points and appropriate marks: 0% - 49% - insufficient (1) 50% - 62% - sufficient (2) 63% - 75% - good (3) 76% - 88% - very good (4) 89% - 100% - excellent (5)

	Title	Number of copies in the library	Availability via other media
Required literature (available in the library and via other media)	Pivac S. (2010), Statistical methods, e-teaching materials, University of Split, faculty of Economics, Split.	1	http://www.efst.unist.hr/o-fakultetu/fakultet/djelatnici/stranice-djelatnika/detalji/spivac
	McClave, J.T., Benson, P.G. Sincich, T. (2009), Statistics for Business and Economics, 11th Edt., Prentice Hall, Upper Saddle River, NJ.	1	
	Teaching materials on Moodle platform for Statistical methods course		Moodle
Optional literature (at the time of submission of study programme proposal)	Dowdy, S., Wearden, S., Chilko, D. (2004). Statistics for Research, New York: John Wiley & Sons. Field A. (2009), Discovering Statistics using SPSS, third edition, SAGE Publications Ltd, London. Manual for SPSS (2008), selected chapters. Vuković, M., Pivac, S., Does financial behavior mediate the relationship between self-control and financial security?, Croatian operational research review, 12 (2021), 1; pp 27-36.		

	Vuković, M., Pivac, S., Babić, Z., Comparative analysis of stock selection using a hybrid MCDM approach and modern portfolio theory, Croatian Review of Economic, Business and Social Statistics (CREBSS), 6 (2020), 2; pp 58-68. Aljinovic Z., Pivac S., Skrabic Peric B. (2017), European Transition Countries' Risk Claccification and Ranking: Ten Years Later, Proceedings of the Twelfth International Conference: "Innovative Responses for Growth and Competitiveness", Bol, Croatia, May 17-19, pp 193-206. Pivac, S., Aljinović Barać, Ž., Tadić, I., (2017), An analysis of human capital investments, profitability ratios and company features in EU. Croatian Operational Research Review, (CRORR), Vol. 8, No. 1, 2017., pp 167-180. Pranić Lj., Pivac, S. (2016), Effects of a partial smoking ban on employees' post-implementation perceptions and job satisfaction in cafes vs. restaurants in Croatia, Tourism and Hospitality Industry, University of Rijeka, Faculty of Tourism and Hospitality Management, pp 350-364.
Quality assurance methods that ensure the acquisition of exit competences	Registering students' success in carrying out of their duties (lecturer). Monitoring lectures and practice sessions (Vice Dean for Education). Students' Performance analysis in each course (Vice Dean for Education). Student questionnaire on the quality of lecturers and lessons for each course (University of Split, Quality Assurance Centre) Examination is used as an instrument to evaluate individual course outcomes by the course lecturer. The content of exam is reassessed periodically in order to assure compliance with the course outcomes.
Other (as the proposer wishes to add)	