

NAME OF THE COURSE		BUSINESS STATISTICS				
Code	ECA004	Year of study	1			
Course teacher	Full professor Snježana Pivac, PhD Associate professor Tea Šestanović, PhD Assistant professor Marija Vuković, PhD	Credits (ECTS)	6			
Associate teachers	Assistant professor Marija Vuković, PhD Karmen Vrhar Šušnjara, mag. oec. Ante Toni Vrdoljak, PhD	Type of instruction (number of hours)	L	S	E	F
			26		26	
Status of the course	Obligatory	Percentage of application of e-learning	40%			
COURSE DESCRIPTION						
Course objectives	Students should be able to process independently the statistical database and interpret the results obtained especially in the field of business statistics.					
Course enrolment requirements and entry competences required for the course	Course signature requirements are determined by the Statute of the Faculty of Economics in Split and Rules and Regulations for Studies and Study Programmes.					
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	<p>Learning outcome of the subject: The expected outcome of learning at the subject level is the training of students for the independently application of statistical methods and techniques and the interpretation of the obtained results.</p> <p>Specific learning outcomes:</p> <ol style="list-style-type: none"> 1. To make and comment the aggregate and composite statistical table. 2. To make the diagram and graphically compare the numerical statistical series and time series. 3. To calculate and to analyze the results of linear correlation analysis. 4. To analyze simple linear and selected nonlinear regression models. 5. To analyze the time series by using individual and aggregative indices. 6. To analyze simple linear and selected nonlinear trend models. 					
Course content broken down in detail by weekly class schedule (syllabus)	Lectures		Exercises			
	Topic	Hours	Topic	Hours		
	Concept and task of statistics, statistical set and characteristics of statistical units.	2	Distribution of frequencies and histograms	2		
	Statistical data collection. Tabular and graphical presentation.	2	Tabular and graphical presentation of statistical series.	2		

	Average values of numeric statistical series (complete and positional).	2	Average values of numeric statistical series (complete and positional).	2
	Quartiles. Relative numbers. Numerical series indices.	1	Quartiles. Relative numbers. Numerical series indices.	1
	Dispersion measures (absolute and relative).	2	Dispersion measures (absolute and relative).	2
	Measures of skewness and kurtosis.	1	Measures of skewness and kurtosis. Descriptive statistics in «Data analysis»	1
	Correlation analysis (linear correlation and rank correlation).	2	Correlation analysis (linear correlation and rank correlation).	2
	Regression analysis - simple linear and exponential regression.	2	Regression analysis - simple linear and exponential regression.	2
	Nonlinear regression analysis and Diagnostic.	2	Nonlinear regression analysis and diagnostics. «Trendline» and «Data analysis» routine.	2
	Time series (concept and graphical display).	1	Time series (concept and graphical display).	1
	Individual indices (chain base and fixed base indices). Conversion of indices.	2	Individual indices (chain base and fixed base indices). Conversion of indices.	2
	Aggregative indices (price, quantity and value). Selected special forms of aggregative indices.	2	Aggregative indices (price, quantity and value). Selected special forms of aggregative indices.	2
	Measures of central tendency for time series.	1	Time series measures of central tendency. Rate of change.	1
	Trend models and diagnostics.	2	Trend models and diagnostics. Prognostic modelling.	2
	Asymptotic trend models.	2	Examples of exam assignments.	2

	<input type="checkbox"/> lectures <input type="checkbox"/> seminars and workshops <input type="checkbox"/> exercises <input type="checkbox"/> on line in entirety <input type="checkbox"/> partial e-learning <input type="checkbox"/> field work	<input type="checkbox"/> independent assignments <input type="checkbox"/> multimedia <input type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> (other)				
Student responsibilities	<p>Students are required to actively participate in classes during lectures and exercises, with the attendance of minimum 70%. 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.</p>					
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	Research		Practical training	
	Experimental work		Report		Self-evaluation tests	0,5
	Essay		Seminar essay		(Other)	
	Tests	2*	Oral exam	1,5	(Other)	
	Written exam	2*	Project		(Other)	
Grading and evaluating student work in class and at the final exam	<p>The exam consists of written and oral part. During the semester two tests will be organized. 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. The test is deemed to be passed if the student correctly and neatly solves and interprets at least 50% of the tasks. Additional condition for accessing the second test is the positively resolved first test. The total score on the written part of the exam is based on the sum of the scores obtained on both tests. Alternatively, students can pass the written exam during the exam period. * A student who achieves a positive grade from the first and second test, does not have to take the written exam. After successfully passing the written part one can undertake the oral part of the exam. The final grade is formed as the average score of the written and oral exam.</p> <p>Key points and appropriate grades for written exam: 0-49 inadequate (1) 50-62 sufficient (2) 63-75 good (3) 76-88 very good (4) 89-100 excellent (5)</p>					
Required literature (available in the library and via other media)	Title		Number of copies in the library		Availability via other media	
	E.Jurun & N.Ratković : Poslovna statistika s primjerima u Microsoft Excelu, Ekonomski fakultet u Splitu, Split, 2017.		10			
	Teachers' handouts and other on-line materials for preparation of mid-term exams and final exams are available on the Moodle				Moodle	

Optional literature (at the time of submission of study programme proposal)	<ul style="list-style-type: none"> • Čeh Časni et al.: Statistika, Element, Zagreb, 2018. • Newbold P. et al.: Statistics for Business and Economics, 9th Ed., Pearson Education, Prentice Hall, Upper Saddle River, NY, 2019. 		
Quality assurance methods that ensure the acquisition of exit competences	<p>Registering students' attendance and success in carrying out of their duties (lecturer).</p> <p>Monitoring lectures and practice sessions (Vice Dean for academic and student affairs).</p> <p>Students' Performance analysis in each course (Vice Dean for academic and student affairs).</p> <p>Student questionnaire on the quality of lecturers and lessons for each course (University of Split, Quality Assurance Centre)</p> <p>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.</p>		
Other (as the proposer wishes to add)	The course is taught in Croatian.		