

COURSE TITLE		BUSINESS STATISTICS				
Course code	SRF009/STT003	Year of study	First			
Lecturer(s)	Nada Roguljić, senior lecturer Julija Mardešić, senior lecturer	ECTS (Number of credits allocated)	5			
Associates		Total lesson hours per semester	Lecture	Seminar	Practical	Laboratory
			15			30
Course status	Compulsory	Percentage share of e-learning	35%			
COURSE DESCRIPTION						
Course Objectives	<ul style="list-style-type: none"> To develop students' ability to apply basic statistical techniques and methods for grouping, tabular and graphical presentation of data, using the computer program MS Excel To train students for analyzing and interpreting statistical information (data) 					
Course enrolment requirements and entry competencies required for the course	None					
Learning outcomes On successful completion of this course, student should be able to:	<ol style="list-style-type: none"> Define basic statistical terms (population, sample, types of statistical variables) Organize data into appropriate tabular and graphical formats Use MS Excel to summarize, analyze, and visualize data Calculate measures of central tendency and dispersion Interpret significance of calculated statistical parameters Identify time series data with absolute and relative indicators Use basic regression analysis in examination of cause – effect relationships. 					
Course content	<p>Introduction to the course. The concept and mission of statistics in business. Definitions of basic statistical terms (sample, population, data, data types...).</p> <p>Descriptive statistics in MS Excel. Formation of statistical series: organization and graphical representation of qualitative data, grouping and displaying of quantitative discrete data, grouping and displaying of quantitative continuous data. Frequency distribution, relative frequencies distribution and cumulative frequencies distribution. Two- and multidimensional frequency distribution - contingency tables. Measures of central tendency: arithmetic mean, mod, median, quartiles. Measures of dispersion: range, interquartile range and quartile deviation coefficient, variance and standard deviation, coefficient of variation. Correlation and regression: simple linear regression model, determination of linear regression equation, standard error of assessment, representativeness of the model, correlation, linear correlation coefficient. Nonlinear regression models: simple exponential regression model, power model. Time series: graphical representation of the time series data, individual indices, chain and fixed base indices. Aggregate indices. Special types of aggregate indices (stock exchange, consumer basket). Trend models: linear trend model, exponential trend model. Application of the trend models for prognostic purposes.</p>					
Types of teaching:	<input checked="" type="checkbox"/> lecture <input type="checkbox"/> seminars and workshop <input checked="" type="checkbox"/> practical <input checked="" type="checkbox"/> combined e-learning		<input type="checkbox"/> self-study <input type="checkbox"/> multimedia <input checked="" type="checkbox"/> laboratory <input type="checkbox"/> mentoring work			

	<input type="checkbox"/> field research		<input type="checkbox"/> (others)		
Student obligations	Attending classes, doing home assignments.				
Monitoring student work (enter the share in ECTS credits for each activity so that the total number of ECTS credits corresponds to the credit value of the course):	Class attendance	1,5	Research		Practical work
	Experimental work		Report		(others)
	Essay		Seminar		(others)
	Self-study	2	Workshop		(others)
	Project		Office hours, mid-term exams and final exam	1,5	(others)
Assessment and evaluation of student work during classes and at the final exam	CONTINUOUS ASSESSMENT				
	Continuous testing indicators			Performance A_i (%)	Grade ratio k_i (%)
	First mid - term exam			50-100	50
	Second mid - term exam			50-100	50
	Students who have not passed the exam through mid-term exams take the final exam				
	FINAL ASSESSMENT				
	Indicators checks – final exam (first and second exam term)			Performance A_i (%)	Grade ratio k_i (%)
	Practical exam (on the computer)			50 - 100	100
	Indicators checks – (third and fourth exam term)			Performance A_i (%)	Grade ratio k_i (%)
	Practical exam (on the computer)			50 - 100	100
	The grade (in percentages) is formed on the basis of all indicators that describe the level of student activities according to the relation:				
	$Grade (\%) = \sum_{i=1}^N k_i A_i$				
	k_i - weighting factor for each activity, A_i - success in percentage achieved for a particular activity, N - total number of activities.				
	PERFORMANCE AND GRADE				
	Percentage		Criteria		Grade
50% - 61%		basic criteria met		sufficient (2)	
62% - 74%		average performance with some errors		good (3)	

	75% - 87%	above average performance with minor errors	very good (4)
	88% - 100%	outstanding performance	outstanding (5)
Required reading	<ol style="list-style-type: none"> 1. Mikelić, K.: Nastavni materijal za predavanja (Moodle) 2. Roguljić, N.: Poslovna statistika, laboratorijske vježbe u MS Excelu, interni materijali za praktikum (Moodle) 		
Optional reading	<ol style="list-style-type: none"> 1. Šošić, I.: Primijenjena statistika, Školska knjiga, Zagreb 2006. 2. Domijan, Ž.: Statistika, Veleučilište u Splitu, Split, 2003. 3. Papić, M.: ,Statistika u MS Excel, Naklada Zoro, Zagreb 2005 		
Quality monitoring to ensure the acquisition of established learning outcomes	<ul style="list-style-type: none"> • Records of class attendance and success in performing student obligations • Updating detailed course curricula • Supervision of teaching activities • Continuous quality control of all parameters of the teaching process in accordance with the Action Plans • Semester-based student survey in accordance with the "Ordinance on the procedure of student evaluation of teaching work at the University of Split" (UNIST, Centre for Quality Improvement). 		
Other information			