

Study Programme: Animal Science			
Course Unit Title: Statistics			
Course Unit Code: 19OCT0003O011			
Name of Lecturer(s): Phd Beba Mutavdzic			
Type and Level of Studies: Undergraduate Academic Studies			
Course Status (compulsory/elective): compulsory			
Semester (winter/summer): winter			
Language of instruction: english			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 4			
Prerequisites: none			
Course Aims: The curriculum of this course is designed to introduce students with the application of modern statistical methods in solving problems in the field of agricultural sciences and agricultural economics. Students need to comprehend the basic methods of descriptive and inferential statistics.			
Learning Outcomes: During the course, students need to become capable of choosing and applying an adequate statistical method in collecting, presenting and analysing data in the fields of agriculture. Students will be able to use the acquired skills in other courses during their studies and in their scientific-research work.			
Syllabus: <i>Theory</i> The fundamentals of statistics. The subject matter and units of observation. Basic set and sample. Observation features. Classification and presentation of statistical data. Analysis of numerical series. Numerical descriptive measures. Theoretical distributions. Discrete and continuous theoretical distributions. Sample. Methods of sample selection. Simple random sample. Statistical inference. Distribution of sample parameters. Principles of parameters estimation. Confidence interval. Hypothesis testing. Testing the hypotheses on arithmetic mean and proportion. Testing the hypothesis in the case of two populations. Analysis of variance. Regression and correlation. Choice of regression function. Simple linear regression. Estimation of regression parameters. Linear correlation. <i>Practice</i> The fundamentals of statistics. Analysis of numerical series. Theoretical distributions. Distribution of sample parameters. Statistical inference. Point and interval estimation of arithmetic mean and proportion. Hypothesis testing. Regression and correlation.			
Required Reading: Mann, P.S., Introductory Statistics, Wiley & Sons, 2010.			
Weekly Contact Hours: 4	Lectures: 2	Practical work: 2	
Teaching Methods: Lectures and tutorials, introduction to statistical software, homework, consultations, tests.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	5	written exam	40
Practical work	5	oral exam	50
Preliminary exam(s)	40	Lecture and practical work attendance	10
Seminar(s)	/	Total	100
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			