Study Programme: Veterinary medicine

Course Unit Title: Statistics

Course Unit Code: 3ИВМ2О08

Name of Lecturer(s): dr Beba Mutavdžić, Associate professor, MSc Tihomir Novaković

Type and Level of Studies: Undergraduate academic studies

Course Status (compulsory/elective): compulsory

Semester (winter/summer): summer

Language of instruction: Serbian

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated: *

Prerequisites: None

Course Aims:

The program in this course enables students to familiarize themselves with the use of modern statistical methods in solving problems in the field of agricultural and biological sciences. Students should be familiar with descriptive methods, as well as methods for analyzing the results of the experiments.

Learning Outcomes:

Throughout the teaching process, students should acquire the ability to use statistical methods and their application in the field of agricultural, biological and related disciplines. Acquired ability to use and adequately use statistics and its methods will enable students to successfully solve problems in further work and acquire education.

Syllabus:

Theory

Basics statistics. Concept and importance of statistics. Statistical set. Units and observation marks. Statistic series. Types of statistical series. Methods for displaying statistics. Formation of frequency distribution. Indicators of central tendency. Variation indicators. Indicators of distribution format. Theoretical distribution. Termination and Continuous Distribution. Sample method. Basic set and sample. Selecting units in a sample. Basic sample plans. Characteristics of distribution of sample parameters. Principles of parameter estimation. The confidence level. Determining sample size. Testing the hypothesis. Principles of testing. Arithmetic mean and proportions tests. Analysis of variance and assumptions for its application. Basic principles of setting up experiments in agriculture. Linear regression and correlation. Basic terms. Scatter plot. Selection of regression function and analysis method. Correlation.

Practice

Analysis of numerical series. Theoretical distributions. Distribution of sample parameters. Statistical conclusion. Spot and interval estimate of the arithmetic mean and proportion of population. Testing the hypothesis. Regression and correlation.

Required Reading:

1.Hadživuković, S., Statistički metodi, Poljoprivredni fakultet, Novi Sad, 1991.

2.Hadživuković S., Statistika, Privredni pregled Beograd, 1989.

3.Lozanov-Crvenković Z., Statistika, PMF Novi Sad, 2002.

4. Čobanović K., Primeri za vežbanje iz Statistike, Poljoprivredni fakultet, Novi Sad, 2003.

5.Mutavdžić,B., Nikolić-Dorić, E., Statistika, Poljoprivredni fakultet Novi Sad, 2018.				
Weekly Contact Hours: 30	Lectures: 1*15	Practical work:1*15		

Teaching Methods:

Lectures and exercises, familiarization with statistical software, knowledge testing, consultations.

Knowledge A	Assessment	(maximum	of 100	points): 100
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Pre-exam obligations	points	Final exam	points
Active class	5	written exam	40

participation				
Practical work	5	oral exam	50	
Test I	20			
Test II	20	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.				