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| Course: | *STATISTICS* |
| Course id: 3ООП7О36 |
| Number of ECTS: 4 |
| Teacher: | Dr Beba Mutavdžić |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures:2 | Practical classes:2 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None |
| 1. Educational goal

The program of this course allows students to become familiar with the use of modern statistical methods in solving problems in the field of agricultural and biological sciences. Students should familiarize themselves with descriptive methods and methods of analysis of experimental results. |
| 1. Educational outcomes

Through the teaching process, students should acquire the ability to use statistical methods and their application in agricultural, biological and related fields. Acquired abilities and appropriate use of statistics and its methods allow students to successfully solve problems in the future work and in obtaining an education. |
| 1. Course content

Theoretical lessonsBasic Statistics. The concept and importance of statistics. Statistical population. Statistical units and observation characteristics. Statistical series. Types of statistical series. Presenting statistical data. Making a frequency distribution. Measures of central tendency. Measures of variability. Measures of distributional shape. Theoretical distributions. Discrete and continuous probability distributions. Sampling methods. Population and sample*.* The selectionofsample units. Basic sample plans. Characteristics of distribution of sample parameters. Principles of parameter estimation. Confidence interval. Determination of sample size. Hypothesis testing. Principles of hypothesis testing. Hypothesis testing for a population mean and a population proportion. Analysis of variance and assumptions for its implementation. The basic principles of the experiment in agriculture. Linear regression and correlation. Basic concepts. A scatter plot. Choice of regression models and methods of analysis.Practical classesAnalysis of numerical series. Theoretical distributions. The sampling distribution. The point and the confidence interval estimation of the population meanandproportion. Statistical inference. Hypothesis testing. Regression and correlation. |
| 1. Teaching methods

Lectures / Practical classes |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam  | Mandatory | Points |
| Lecture attendance | Yes | 10 | *Theoretical part of the exam/Oral part of the exam/* | Yes | 40 |
| Test | Yes | 40 |  |
| Exercise attendance | Yes | 10 |
| Other | No |  |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Hadživuković, S. | Statistical Methods | Agricultural faculty, Novi Sad | 1991. |
|  | Lozanov-Crvenković Z. | Statistics | Faculty of Sciences, Novi Sad | 2012. |
|  | Чобановић К | Examples and exercises in Statistics | Agricultural faculty, Novi Sad | 2003. |
|  | Zar, J.  | Biostatistical Analysis, Fifth Edition | Prentice Hall, 2010 | 2010. |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationUNDERGRADUATE ACADEMIC STUDIES Organic Agriculture |
| Table 5.2 Course specification |