# **Course Information Sheet**

**University:** University of Prešov

Faculty: Faculty of humanities and natural sciences

Code: 2EKO/STAT1/22Title of Course: Statistics for Ecologist 1

Form of Study: lecture, practical seminar

### Number of contact hours:

per week: 2 hours of lecture/1 hour of practical seminar

### per level/semester:

20 hours of lectures, 10 hours of practical seminars, 60 hours of self-study and individual work in the PAST program, 30 hours - assignment work

### Number of credits: 4

Semester: 2 nd year of study, winter semester

# **Degree/Level:** 1

# Prerequisities: -

# Grading Policy (Assessment/Evaluation):

During the semester there will be two written tests, each for 50 points. To successfully complete it, it is necessary to submit both tasks and obtain at least 50% success in them.

The criteria for successful completion of the course (percentage expression of results in the evaluation of the exam from the subject) are for the following grades:

a) A - 100.00 - 90.00%

- b) B 89.99 80.00%
- *c*) *C* 79.99 70.00%

d) D - 69.99 - 60.00%

e) E - 59.99 - 50.00%

*f) FX* - 49.99 and less%

# Aims and Objectives:

After completing the course, the student will demonstrate the ability to:

- work in the PAST program

- explain basic statistical concepts

- verify the normality of the data and characterize the data set on the basis of descriptive statistics

- correctly select and create graphs for individual data types

- correctly select a statistical test and interpret its results

# **Syllabus/Indicative Content:**

1. Introduction to statistics, introduction to the subject and evaluation, what is statistics

2. Basic statistical concepts, types of data,

3. Normality of data and possibilities of its verification, dependent and independent measurements

4. Introduction to the PAST program

5. Basic characteristics of the statistical file, Basic types of graphs

6. Parametric and non-parametric tests for 2 independent measurements

7. Parametric and non-parametric tests for 2 dependent measurements

8. Repetition and practice of test selection procedure

9. Parametric and nonparametric tests for x independent measurements

10. Parametric and nonparametric tests for x dependent measurements

11. Correlation and regression

12. Linear regression and multiple regression

13. Repetition and practice of test selection procedure

# Suggested readings:

Salkind, N.J.: Statistics for people who hates statistics. London: SAGE Publications, 2011. Howell, D.C.: Fundamental Statistics for the Behavioral Sciences. USA: Cengage Learning, 2011.

Coolidge, F.L.: Statistics. London: SAGE Publications, 2013.					
Pekár, S., Brabec, M. Statistics. Praha: Scienta, 2009.					
Language of Instruction: english					
Other course information:					
Grading history					
А	В	С	D	Е	FX
а	b	с	d	e	f
Uvádza sa percentuálny podiel hodnotených študentov, ktorí získali po zapísaní predmetu hodnotenie A, B, FX. Celkový súčet a, b, c, d, e, f je 100. Ak študent v jednom roku získal FX a po ďalšom zapísaní predmetu hodnotenie D, zohľadnia sa obe jeho hodnotenia.					
Lecturer/Instructor: RNDr. Lenka Demková, PhD.					
Last update: 12.01.2022					
Approved by:					