Course title: METHODS IN PHYTOCENOLOGICAL RESEARCH	

Teachers: Dr. Dragana Vukov, Dr. Ružica Igić

Course status: elective

Number of ECTS: 15

Condition: -

Objective of the course:

The aim of this course is to learn about values and diversity, as well as basic methods of survey of plant communities.

Outcome of the course

Within the course, students will be introduced to traditional and new methods of sampling and analysis of vegetation data and trained in their implementation.

Contents of the course
Theoretical lectures
Introduction to the basic vegetation types of the Republic of Serbia. Introduction to basic methodological approaches to the vegetation survey. Braun-Blanquet approach in vegetation survey. Formation of databases. Analyzes of large vegetation data sets. Use of software tools in vegetation analysis. Additional data in large scale vegetation analyzes. Vegetation classification with different software tools. Interpretation of data obtained by numerical classification of vegetation data. Formal definition of traditional and new syntaxonomical categories.
Practical lectures
Practical lectures involves plant material in order to learn about the diversity of the basic vegetation types in Serbia. As part of the practical lectures, field research will be also realized. Main topics of practical lectures are: basic methods of vegetation sampling; phytocenological recording by Braun-Blanquet method; data entry and digitization; updating and editing the vegetation database; methods in the numerical classification of vegetation data; practice of classified data; presentation and interpretation of results.

References:

1. Mucina et al.. (2016): Vegetation of Europe: hierarchical floristic classification system of vascular plant, bryophyte, lichen, and algal communities. - Applied Vegetation Science 19 (Suppl. 1): 3–264.
2. Tichý, L. 2002. JUICE, software for vegetation classification. Journal of Vegetation Science. 13:451–453.
3. Lepš, J., Šmilauer, P. 2003. Multivariate Analysis of Ecological data using CANOCO. Cambridge University Press. Cambridge.
4. McCune, B., Mefford, M.J. 1999. PC-ORD. Multivariate analysis of Ecological Data, Version 5.0 for Windows. - MjM Software Design, Gleneden Beach.
5. Hill M. O., Šmilauer P. 2005. TWINSPAN for Windows version 2.3. – Centre for Ecology & Hydrology, Huntingdon, and University of South Bohemia, České Budějovice.

Number of active teaching hours	Theory: 5	Practice: 5

Teaching methods

Lectures and practical classes (individual and group work of students). Lectures, lab work, colloquiums, field work, seminar work on selected topics.

Knowledge score (maximum points 100)

Pre-exam obligations
Practical lectures 20

Colloquiums 10

Seminar work 10

Final exam
Written exam 30

Oral exam 30