Course Unit Descriptor

Study Programme: MSc Ecology

Course Unit Title: Bryology

Course Unit Code: ME28

Name of Lecturer(s): Dragana Vukov

Type and Level of Studies: Master Academic Degree

Course Status (compulsory/elective): elective

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: 7

Prerequisites: None

Course Aims: Introduction to morphology, taxonomy, systematics, ecology and ecological importance of bryophytes

Learning Outcomes: Basic knowledge about the morphology, systematics and ecology of bryophytes. Students are trained for identification of basic groups. The course provides the knowledge about bryphyte ecological importance and functions in ecosystems.

Syllabus:

Theory

Basic concepts in bryology; Morpho-anatomical characteristics of the liverworts; Principles of classification and macroevolution of liverworts; Morpho-anatomical characteristics of mosses; Principles of classification and macroevolution of mosses; Morpho-atomical characteristics of hornworts; Principles of classification and macroevolution of hornworts; Adaptation of bryophytes to different environmental conditions; Basic ecophysiological characteristics of bryophytes; Distribution and diversity of bryophytes on a global scale; Diversity of bryophytes in Serbia; Functions of bryophytes in different types of ecosystem; Endangered species of bryophytes and conservation strategies; Application of bryophytes as bioindicators; Importance and application of moss in different aspects of human life

Practice

Basic laboratory methods in bryology; Making microscopic preparations of bryophytes; Keys for the identification of bryophytes; Morphological characteristics of liverworts; Morphological characteristics of mosses; Morphological characteristics of the hornworts; Determination of the liverworts; Determination of mosses (Sphagnopsida); Determination of mosses (Polytrichopsida); Determination of mosses (Bryopsida); Determination of mosses (Bryopsida); Determination of mosses (Bryopsida); Determination of hornworts; Morphological adaptations on examples of concrete species; Application of statistical methods in bryology.

Required Reading:

Vanderpoorten, A., Goffinet, B. 2009. Introduction to bryophytes. Cambridge University Press

Goffinet, B., Shaw, J. 2000. Bryophyte biology. Cambridge University Press. New York

Glime, J. M. 2015. Bryophyte ecology. Available online at: http://www.bryoecol.mtu.edu/

Smith, A. (ed.) 1982. Bryophyte ecology. Springer Netherlands.

Weekly Contact Hours:	**Lectures:** 2	**Practical work:** 2+0+4

Teaching Methods:

lectures, practical classes

Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	**Final exam**	points
Active class participation		written exam	20
Practical work		oral exam	50
Preliminary exam(s)		…….	
Seminar(s)	30		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			