## **COURSE INFORMATION SHEET**

**University:** Catholic University in Ružomberok

Faculty: Faculty of Education

Course code: KBE/Bi-

**Course title:** Botany II

BD107A/22

Type and range of planned learning activities and teaching methods:

Form of instruction: Lecture / Seminar

**Recommended study range:** 

hours weekly: 1/3 hours per semester: 13/39

**Teaching method:** on-site

Credits: 5 Working load: 125 hours

**Recommended semester/trimester:** 4.

Level of study: I.

Prerequisities: KBE/Bi-BD104A/22

# Requirements for passing the course:

Verification of the degree of acquisition of the relevant knowledge, skills and competences of the student is carried out on the basis of theoretical and practical examinations during the semester teaching of the subject.

Continuous assessment is based on the evaluation of the student's independent work, practical skills and knowledge of the student. During the semester, there will be two written tests at the exercises. A maximum of 10 points can be obtained for each test. During the semester, the student completes continuous field exercises. He can get a maximum of 20 points from the identification of species. The final assessment consists of an oral exam. In order to participate in the exam, it is necessary to get at least 20 points from the test and the ID card. At the final oral exam, the student can get max. 60 points. The final evaluation will be based on the total number of points obtained from the background checks and the oral exam.

A – 100%-93% B – 92%-85% C –84%-77% D –76%-69% E –68%-60% Fx –59%- 0%

# Learning outcomes of the course:

Objective of the subject:

The aim of the subject is to provide basic theoretical knowledge and practical skills for teaching the biology subject at primary and secondary schools in the field of morphology, histology and organology of plants.

Learning outcomes:

- The student knows and understands theoretical knowledge about the hierarchical classification system of vascular plants, phylogenetic and morphological-ecological relationships (characters).
- The student can analyze the main developmental branches of vascular plants and diagnostic features of selected representatives.
- He is able to analyze the primordial phylogenetic forms of plants with their developmental tendencies up to the present.
- Develops skills in recognizing and identifying individual types of plants.
- Can apply practical abilities and skills when working with instruments, devices and materials in the field of research in the laboratory and in the field
- Can competently present acquired knowledge and skills

## **Course contents:**

Subject, content and significant personalities (history) of systematic botany and taxonomy Approaches to biological classification

Botanical Nomenclature (Botanical Nomenclature Code)

The position of vascular plants in the phylogeny of organisms

spore and seed plants

Internal differentiation of the classification system of spore vascular plants,

Internal differentiation of the gymnosperm classification system (Pinophyta, Gymnospermae)

Internal differentiation of the classification system of angiosperms (Magnoliophyta, Angiospermae)

# **Recommended or required literature:**

# Language of instruction:

BUBLINEC, E., DEMKO, J., MACKO, J. MACHAVA, J., Základy prírodného prostredia 1. časť: Pedológia Ružomberok, VERBUM - vydavateľstvo KU, 2018. - 191 s. ISBN 978-80-561-0530-6

DOSTÁL, J. ČERVENKA, M. 1992: Veľký kľúč na určovanie rastlín I. II. SPN, Bratislava. DOSTÁK, J. FUTÁK, J. NOVÁK F. A. Flóra Slovenska . I , Všeobecná časť. Vydavateľstvo Slovenskej akadémie vied Bratislava, 1966. 602 s.

HALAMOVÁ, M., SANIGA, M. 2006. Structure, production and regeneration processes in the oak primeval forest in the National Nature Reserve Boky. Folia oecol., 33: 13–26.

MÁRTONFI, P. Systematika cievnatých rastlín. UPJŠ, Košice. 2007. 220 s. ISBN 978-80-7097-694-4

MORAVEC, J. Fytocenologie . Akademie věd České republiky , 1994. 403 s. ISBN 80-200-0128-X

SANIGA, M., BALANDA M. Vzťah medzi produkčnými charakteristikami biomasy a mŕtveho dreva vo vybraných vývojových štádiách pralesa npr hrončecký grúň. Acta facultatis forestalis Zvolen: 39.

SANIGA, M., 2000. Štruktúra, produkčné a regeneračné procesy tisa obyčajného v štátnej prírodnej rezervácii Plavno. Forest Sci, 46, pp.76-90.

# **Notes:**

### **Course evaluation:**

Assessed students in total: 21

A	В	С	D	Е	FX
38.1	4.76	14.29	14.29	9.52	19.05

Name of lecturer(s): Ing. Jozef Macko, PhD., doc. Ing. Miroslav Saniga, CSc.

Last modification: 23.08.2022

#### **Supervisor(s):**

Guarantor:

Administrátor Systému

People responsible for the delivery, development and quality of the study programme:

prof. ThDr. Rastislav Adamko, PhD., doc. Mgr. Marek Babic, PhD., doc. RNDr. Pavel Bella, PhD., prof. PaedDr. Mgr. art. Rastislav Biarinec, ArtD., prof. Irina Chelysheva, DrSc., prof. PaedDr. František Dlugoš, PhD., Mgr. Juraj Dvorský, PhD., prof. PhDr. Ingrid Emmerová, PhD., doc. Tatiana Korenkova, CSc., prof. PaedDr. Milan Ligoš, CSc., doc. Mgr. Eva Litavcová, PhD., doc. PaedDr. Peter Mačura, PhD., prof. PhDr. David Papajík, PhD., doc. Ing. Miroslav Saniga, CSc., prof. Nóra Séllei, PhD., DrSc., PhDr. ThLic. Martin Taraj, PhD., Prof. Ing. Peter Tomčík, PhD., prof. Dr. phil. fac. theol. Peter Volek, doc. Ing. Igor Černák, PhD.