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| Course: | Soil genesis and Soil Classification System |
| Course id: 3МЗИ1И07 |
| Number of ECTS: 6 |
| Teacher: | Milivoj Belic, PhD, full professor; Ljiljana Nesic, PhD, associated professor; Vladimir Ciric, PhD, assistant professor |
| Course status | Elective |
| 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** of the course is that students acquiring knowledge about the origin, evolution, characteristics, causes of variability, the laws of geographical distribution and classification of soil classification.
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| 1. **Educational outcomes** of the course are the education and training of students for professional and scientific work in the field of the science of soil-soil science.
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| 1. **Course content**

Theoretical classes:Definition and basic characteristics of the soil. Pedogenetic factors. General and specific pedogenetic processes. Genesis of the soil (genesis and evolution of the soil). Morphological properties of the soils. Systematic and soil classification. Classification systems and principles of soil classification of Yugoslavia. Order of automorphic soils. Order of hydromorphic soils. Order of halomorphic soils. Order of subaqual soils. Geography of the soil, Cartography and Soil Quality Evaluation. The modern world soil classification: ST - Soil Taxonomy, WRB - World Reference Base for Soil Resources, Coordinate system – Fitz Patrick, 1998, cit. FAO, ISRIC and ISSS 1998.Russian Soil Classification System, 2,001thPractical classes:Methodology of the field survey of soil. Description of morphological characteristics of the soil and filling in to the forms. The collection of georeferenced soil samples for soil investigations and water samples aquifer. Determination of genetic and diagnostic horizons and determination of the type or group soil to domestic and international classification. Entering and systematization of the results of field and laboratory research into a soil information system. |
| 1. Teaching methods

Lectures, Practice/ Practical classes, Consultations, study, research work |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam  | Mandatory | Points |
| Lecture attendance | Yes | 5 | *Written part of the exam-tasks and theory* | Yes | 30 |
| Exercise attendance | Yes | 5 | *Oral part of the exam* | Yes | 30 |
| Colloquium  | Yes | 10 |  |
| Seminar paper | Yes | 20 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | A.Škorić, G.Filipovski, M.Ćirić | Klasifikacija zemljjišta Jugoslavije | Akademija nauka i umjetnosti Bosne i Hercegovine. Sarajevo | 1985 |
|  | Arso Škorić | Postanak, razvoj i sistematika tla | Fakultet poljoprivrednih znanosti Sveučilišta u Zagrebu. Zagreb | 1986 |
|  | World soil resources reports 103 | World reference base for soil resources - A framework for international classification, correlation and communication | Food and Agriculture Organization of the United Nations, Rome | 2006 |
|  |  | Guidelines for soil description. Forth edition | Food and Agriculture Organization of the United Nations, Rome | 2006 |
|  | Husnija Resulović. Hamid Čustović, Izet Čengić | Sistematika tla/zemljišta nastanak svojstva i plodnost | Univerzitetski udžbenik. Sarajevo | 2008 |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationMASTER ACADEMIC STUDIES: SOIL SCIENCE AND PLANT NUTRITION |
| Table 5.2 Course specification |