

SOIL TAXONOMY (Ist Year of study, Ist SEMESTER)

Credit value 7

Course category

Synthesis (Optional)

Course holder:

Conf. dr. Feodor FILIPOV

Discipline objectives (course and practical works)

- Knowledge of the Romanian Soil Taxonomy System (SRTS - 2003);
- Characterization and description of the soil profile in the field;
- Expeditious determination in the field of some soil properties;
- Diagnosis of soil units based on diagnostic elements identified in the field and determined in the laboratory;
- Establishing and describing higher and lower rank taxonomic soil units;
- Establishing the formula of ground units for maps at different scales.

Specific objectives

- ✓ characterization of the soil profile;
- ✓ knowledge of pedogenetic horizons and diagnostic properties for higher and lower taxonomic units within SRTS-2003 and 2012;
- ✓ knowledge of the correlation of taxa from previous classifications with those of the Romanian Soil Taxonomy System (2003, 2012);
- ✓ knowledge of the correlation of the taxa from the Romanian Soil Taxonomy System (2003, 2012) with the taxa used in international classifications (WRB)

Contents (syllabus)

Course (chapters/subchapters)
1. Introduction 1.1 History of the international soil classifications 1.2. History of the main classifications elaborated in Romania
2. Romanian Soil Classification System (1979) 2.1 Basic elements of classification; 2.2 Diagnostic elements (Horizons and diagnostic characters). 2.3 Classification of soils at lower level;
3. Sistemul Român de Taxonomie a Solurilor (2003) 3.1 Elementele de bază ale taxonomiei solurilor; 3.2 Structura Sistemului de Taxonomie a solurilor 3.3. Taxonomia solurilor la nivel superior; 3.4 Taxonomia solurilor la nivel inferior.
3. Romanian Soil Taxonomy System (2003) 3.1 Basic elements of soil taxonomy; 3.2 Structure of the Soil Taxonomy System 3.3. Soil taxonomy at a higher level; 3.4 Soil taxonomy at lower level.
4. Changes of the Romanian Soil Taxonomy System compared to the Romanian Soil Classification System (1979).

5. Comparison of the Romanian Soil Taxonomy System (SRTS, 2003, 2012) with the Romanian Soil Classification System (SRCS, 1979)

6. Comparison of the Romanian Soil Taxonomy System (SRTS, 2003) with the main International Soil classification systems I

Practical works
1. Diagnostic elements of the higher level classification.
2. Diagnostic elements of the lower level classification
3. Determining the degree of gleyzation and water stagnation of soils
4. Determining the degree of soil salinization
5. Soil texture
6. Indicative determination of soil properties in the field

Bibliography

1. Blaga Gh. Filipov F., Rusu I., Udrescu S., Vasile D. - Pedologie. Ed. ACADEMIC PRESS, Cluj – Napoca, 2005.
 2. Filipov F., Lupascu Ghe. -Pedologie. Alcatuirea geneza si clasificarea solurilor.Editura. Terra nostra, Iasi, 2003
 3. Filipov F., - Pedologie. Ed. “Ion Ionescu de la Brad” Iași. 2005.
 4. Florea N., Munteanu I., 2003, 2012- Sistemul Român de Taxonomie a Solurilor.
 5. Merlescu Er., - Solurile României. Curs litografiat, IAI Iași.
 6. Teșu C. - Pedologie, Atelierul de Multiplicare, Universitatea Agronomică Iași 1994.
 7. Vlad V., Florea N., Toti M., Mocanu Victoria, 2014 - Corelarea sistemelor de clasificare a solurilor SRCS și SRTS. Sistemul SRTS+. Craiova Ed. SITECH. ISBN 978-606-11-4331-3
- *** Metodologia elaborării studiilor pedologice, vol. I, II și III. ICPA București
- *** Sistemul Român de Clasificare a Solurilor (1979) ICPA București
- ***IUSS Working Group WRB, World Reference Base for Soil Resources 2014, update 2015. World Soil Resources Reports No. 106, FAO, Rome, 2015.

Evaluare finală

Evaluation form	Evaluation Methods	Percentage of the final grade
Exam	Oral examination	60%
Appreciation of the activity during the semester	Oral assessment during the semester, verification tests and final laboratory	40%

Contact

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