Table 5.2. Subject/module curriculum on MSc study course

<table>
<tr><td colspan="4">Studying course: Ecological engineering for soil and water resources protection</td></tr>
<tr><td colspan="4">Module 2. Degradation and protection of soil resource</td></tr>
<tr><td colspan="4">Subject/module: Agroforestry systems</td></tr>
<tr><td colspan="4">Professor/professors: Lukić S. Sara; Beloica R. Jelena</td></tr>
<tr><td colspan="4">Status of the subject/module: mandatory</td></tr>
<tr><td colspan="4">ECTS credits: 5</td></tr>
<tr><td colspan="4">Prerequisites: -</td></tr>
<tr><td colspan="4">Learning objectives:
The main objective of this course is to enable students to acquire knowledge about agroforestry land use systems where forests develop in communities with agricultural production in a specific spatial distribution based on the principles of ecological and economic interactions between components: forests and agricultural crops and/or animals in system.</td></tr>
<tr><td colspan="4">Learning outcomes:
Full ability to apply knowledge in this field in practice, as well as preparation for doctoral studies.</td></tr>
<tr><td colspan="4">Content
Theoretical part:
The role and significance of the agroforestry systems as sustainable land use in land management; Agroforestry systems (Level I) (different combinations of land use patterns in agriculture and forest (forest plantations)); Spatial and temporal arrangement of agroforestry components; Ecological basics of agroforestry; Social and economic aspects; Land degradation processes and agroforestry systems; Modeling and development of agroforestry systems; International, regional and national agroforestry strategies, policies and legislation (UNCCD, UNCBD, EGD, New EU Forest Strategy 2030, CAP…).
Practical part:
Preparation of a case study/elaborate in small groups (2-3 students) for the implementation of the agroforestry system/practice in given conditions - analysis of environmental conditions, proposal of a solution, planning and design of the proposed solution, elaboration of the concept for user education and promotion of the practice. Case study presentation and discussion.</td></tr>
<tr><td colspan="4">Literature/References:
Nair P.K.R. (1993): An Introduction to Agroforestry. Kluwer Academic Publishers, ICRAF
Riguero-Rodriguez A., McAdam J., Mosquera-Losada M.R. (2009): Agroforestry in Europe. Current State and Future Prospects. Advances in Agroforestry. Springer
Lukić S. (2019): Šumski zaštitni pojasevi – praktikum. Univerzitet u Beogradu Šumarski fakultet
Schnabel, S., Ferreira, A. (2004): Sustainability of Agrosilvopastoral Systems – Dehesas, Montados-, A Cooperating Series of the International Union of Soil Science (IUSS)</td></tr>
<tr><td>Contact hours:</td><td>Lectures: 2</td><td colspan="2">Practical: 3</td></tr>
<tr><td colspan="4">Teaching methods:
Lectures with introduction to the literature from this discipline. Guest lectures. Practical - through preparation of case studies, students acquire practical knowledge for the analysis of environmental conditions, planning and application of appropriate systems/practices of agroforestry in order to achieve ecological and economic benefits using available digital databases and training to show personal initiative in solving the problems of applying agroforestry systems. Term/seminar paper - through the preparation of a seminar paper, students are trained to search and use the available literature for a deeper analysis of the given topic, and through the presentation they acquire skills for the promotion of agroforestry practices. Field trip.</td></tr>
<tr><td colspan="4">Assessment (max 100 points)</td></tr>
<tr><td>Before exam obligations:</td><td>points</td><td>Final exam:</td><td>points</td></tr>
<tr><td>Activity during lectures</td><td>10</td><td></td><td></td></tr>
<tr><td>Activity during practical</td><td>20</td><td>Oral exam</td><td>45</td></tr>
<tr><td>Seminary /term paper</td><td>25</td><td></td><td></td></tr>
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