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| **Study program:** Chemistry (PhD) | | |
| **Course title: Secondary metabolites as biomarkers (H311C)** | | |
| **Name of lecturer/lecturers: Gordana S. Stojanović** | | |
| **Type of course: elective** | | |
| **Number of ECTS allocated 10** | | |
| **Course objectives**  **Acquiring knowledge about the possibility of using secondary metabolites in systematics of plants at**  **basis of phylogenetic trees obtained by cladistic analysis.** | | |
| **Course outcomes**  **After successful completion of this course, the student is able to:**  **Considers kinship relationships between taxonomic categories based on content data secondary metabolites.** | | |
| **SYLLABUS**  *Lectures*  *History of biochemical systematics. Application of secondary metabolites in systematics. Variability of secondary metabolites. Distribution, biosynthesis and taxonomic importance of alkanes, fatty acids, polyacetylenes. Distribution, biosynthesis and taxonomic importance of terpenes, aromatic and aliphatic volatile compounds, sulfur compounds, alkaloids, cyanogenic glycosides and flavonoids.* | | |
| **References**  P. Marin, Biohemijska i molekularna sistematika biljaka, NNK Internacional, Beograd, 2003. | | |
| **Active teaching classes** | **Lectures 105** | **Laboratory work** |
| **Teaching mode** | | |
| **ASSESSMENT METHODS AND CRITERIA (Max 100 points)** | | |
| Activity during lectures 5; Teaching colloquia 60; writen examination 35; | | |