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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | [**Faculty of Sciences and Mathematics**](http://wpresspmf.pmf.ni.ac.rs/?lang=en) |
| **GENERAL INFORMATION** |
| Study program  | Geography |
| Study Module (if applicable) | Geography |
| Course title | Geochemistry |
| Level of study | ☐Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☐ Obligatory ☐ Elective |
| Semester  |  ☐ Autumn ☐Spring |
| Year of study  | The second year |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Dragan Đorđević |
| Teaching mode |  **☐**Lectures ☐Group tutorials ☐ Individual tutorials ☐Laboratory work ☐ Project work ☐ Seminar ☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| The course aimsIntroducing students to the basic concepts of Geochemistry and the ability to apply acquired knowledge in solving various geochemical problems. Special attention will be paid to the application of geochemistry in environmental protection.OutcomeWho passed the exam student will be able to apply the acquired knowledge in solving geochemical problems and environmental problems related to the geochemical behavior and migration of elements in the environment |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| ContentsTheoretical bet onIntroduction. History and definition of geochemistry. Thermodynamics in geochemistry. Aspect of the structure and composition of the Earth and the Earth's crust. Geochemistry of igneous rocks. Geochemistry of metamorphic rocks. Geochemistry of sedimentary rocks. Complete geochemical analysis of limestone, igneous, silicate rock. The origin of organic matter in sediments, bitumen formation, migration, accumulation, definition, isolation, structure determination, maturation. Oil. Gas. The genesis, composition, classification, types according to the degree classification. Practical teaching:Exercise, Other modes of teaching, Study research workGeochemical analysis of limestone. Geochemical analysis of igneous rocks. Geochemical analysis of silicate rocks. Geochemical analysis of oil shale. Geochemical analysis of oil. Geochemical analysis of coal.  |
| **LANGUAGE OF INSTRUCTION** |
| ☐Serbian (complete course) ☐ English (complete course) ☐ Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)☐Serbian with English mentoring ☐Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **ASSESSMENT METHODS AND CRITERIA** |
| **Pre exam duties** | **Points** | **Final exam** | **points** |
| **Activity during lectures** | **5** | **Written examination** |  |
| **Practical teaching** | **15** | **Oral examination** | **30** |
| **Teaching colloquia** | **50** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |