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| **Study program** Applied chemistry with the management basics |
| **Course title** Organic pollutants (H254C) |
| **Name of lecturer/lecturers** Aleksandra S. Đorđević |
| **Type of course** Elective |
| **Number of ECTS allocated** 5 |
| **Course objectives**The aim of the course is to acquire knowledge about the structure, physical, chemical and ecotoxicological properties of organic substances - polluting substances of the environment, which are in the category of dangerous and harmful matter. |
| **Course outcomes**Upon successful completion of this course, the student is able to:- recognize current organic polluting substances (determined by the relevant bodies dealing with heir legal regulations),- understand their physical, chemical and ecotoxicological properties. |
| **SYLLABUS***Lectures*Structure, classification, and nomenclature of organic compounds. Physical, physico-chemical and toxicological characteristics of organic pollutants. Examples of the most important organic pollutants in the environment (petroleum pollutants; persistent organic pollutants; pesticides and other halogenated organic compounds; pharmacologically active organic substances). The fate of organics substances in the environment (movement through the matrices of water, air, and soil). Stability and reactivity of organic pollutants. Toxicological profile of polluting substances. Examples of specific environmental disasters caused by organic pollutants. Legislation. *Laboratory work*Experimental and theoretical determination of properties of organic pollutants. Search relevant literature and database. Identification and analysis (instrumental techniques) of appropriate organic pollutants in environmental samples. |
| **References**1. P. Pfendt, Hemija životne sredine, 1. Deo, Zavod za udžbenike Beograd, 2009.2. P. Pfendt, Hemija životne sredine, 2. Deo, Zavod za udžbenike, 2017.3. D. Đurić, Lj. Petrović, Zagađenje životne sredine i zdravlje čoveka-ekotoksikologija, Velarta, Beograd, 1996.4. R.P. Schwarzenbach, P.M. Gschwend, D.M. Imboden, Environmental organic chemistry, second edition, JohnWiley & Sons, New Jersey, 2003.5. D. Marković, Š. Đarmati, I. Gržetić, D. Veselinović, Fizičkohemijski osnovi zaštite životne sredine-izvori zagađenja, posledice i zaštita, Zavod za grafičku tehniku Tehnološko-metalurškog fakulteta, Beograd, 1996. |
| **Active teaching classes** | **Lectures** 30 | **Laboratory work** 30 |
| **Teaching mode**Interactive lectures, laboratory exercises, consultations. |
| **ASSESSMENT METHODS AND CRITERIA (Max 100 points)** |
| **Pre exam duties** | **Points** | **Final exam**  | **Points** |
| Activity during lectures | 5 | Written examination | 60 |
| Practical teaching | 5 | Oral examination |  |
| Teaching colloquia | 30 |  |  |
| Seminar |  |  |  |