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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Science and Mathematics |
| **GENERAL INFORMATION** |
| Study program  | Chemistry |
| Study Module (if applicable) |  |
| Course title | Electrochemistry |
| Level of study | ☐Bachelor **☐** Master’s ☐ Doctoral |
| Type of course | **☐** Obligatory ☐ Elective |
| Semester  |  ☐ Autumn **☐**Spring |
| Year of study  | 1st |
| Number of ECTS allocated | 7 |
| Name of lecturer/lecturers | Milan Mitic |
| Teaching mode |  **☐**Lectures ☐Group tutorials ☐ Individual tutorials **☐**Laboratory work ☐ Project work **☐** Seminar ☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Based on material previously adopted in the field of physical chemistry, the objective of the course is to provide students a basic theoretical and practical knowledge in electrochemistry. The main purpose is to Understanding the electrochemical phenomena and laws, and the ability to application of the acquired knowledge in further education. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| General electrochemical concepts. Introduction to electrochemistry: thermodynamics, electrode potentials, galvanic and electrolytic cells, electrode kinetics, dynamic electrochemistry, mass transport by migration, diffusion and convection, diffusion layers. Conductivity. Liquid and solid electrolytes. Potentiometry. Potentiostatic and galvanostatic experiments. Polarisation curves. |
| **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** | **10** |
| **Practical teaching** | **15** | **Oral examination** | **30** |
| **Teaching colloquia** | **40** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |