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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Sciences and MathematicsDepartment of Chemistry |
| **GENERAL INFORMATION** |
| Study program  | **Chemistry** |
| Study Module (if applicable) | Research and development; High school chemistry professor |
| Course title | Dynamic stereochemistry  |
| Level of study | [ ] Bachelor [x]  Master’s [ ]  Doctoral |
| Type of course | [x]  Obligatory [ ]  Elective |
| Semester  |  [ ]  Autumn [x] Spring |
| Year of study  | first |
| Number of ECTS allocated | 7 |
| Name of lecturer/lecturers | Gordana Stojanović |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [ ] Laboratory work [ ]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Acquiring knowledge about the influence of steric effects on the reactivity of organic compounds and the outcome of their reaction. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| * Chirality, nomenclature of stereoisomers, prochirality, conformation.
* Stereoselective and stereospecific reactions: the definition, nucleophilic addition to the carbonyl group, electrophilic addition, substitution reaction.
* Conformational effects in reactions of epoxide opening and closing (Fürst-Plattner rule).
* Cyclization reactions (Baldwin's rules).
* Pericyclic reactions: division, theories of pericyclic reactions.
* Electrocyclic reaction.
* Cycloaddition reaction. Sigmatropic rearrangement.
* Group transfer reactions.
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| **LANGUAGE OF INSTRUCTION** |
| [x] 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** | **6** | **Written examination** | **40** |
| **Practical teaching** | **10** | **Oral examination** | **/** |
| **Teaching colloquia** | **44** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |