|  |
| --- |
|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Technology |
| **GENERAL INFORMATION** |
| Study program  | **Food Technology and Biotechnology** |
| Study Module (if applicable) | Biotechnology, Pharmaceutical and Cosmetic Engineering module |
| Course title | Pharmaceutical Biotechnology |
| Level of study | [ ] Bachelor [x]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [ ]  Autumn [x] Spring |
| Year of study  | 1st  |
| Number of ECTS allocated |  |
| Name of lecturer/lecturers | Miodrag Lazić, Ivana Karabegović |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [x] Laboratory work [ ]  Project work [x]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *The aim of this course is to introduce students to the methodology of biotech processing carbon-hydrate raw material for pharmacologically active substances for making finished medicines.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Biotechnological production of pharmacologically active substances. Antibiotics (penicillin, tetracycline, streptomycin, etc.) Polysaccharides (dextran, xanthan, pullulan) Vitamins (vitamin B-12, vitamin B-2, β-carotene, etc.).****derivatives of naturally occurring steroid (cortisone, hydrocortisone and prednisolone). Enzymes (α-amylase, glucoamylase, pectinase, etc.). Organic acids (citric, gluconic, itaconic, etc.). Biomass with higher content of microelements.** |
| **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** | **10** | **Written examination** |  |
| **Practical teaching** | **10** | **Oral examination** | **50** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |