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| Course: | *DAIRY ENGINEERING* |
| Course id: 3OST8I49 |
| Number of ECTS: 6  |
| Teacher:  | PhD full professor Anka Popović-Vranješ |
| Course status | Elective |
| Number of active teaching classes (weekly) |
| Lectures:2 | Practical classes:2 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None |
| 1. Educational goal

The student should acquire a basic knowledge and understanding related to equipment in the dairy industry, fluids (water, hot water, steam, coolant), also the security conditions that must be in facilities for the production of milk and milk products. |
| 1. Educational outcomes

The formation of specialists with academic education, which has significantly broadened and deepened knowledge in relationthe knowledge gained in high school, as well as the knowledge necessary for understanding the scientific basis of the field of livestockproduction-engineering in the dairy industry. |
| 1. Course content

*Theory lessons*The basic characteristics of technical and technological equipment in the production and processing of milk. Automation. Legitimateregulations. Terms. Technical characteristics of important equipment. Energy Media, quantity and quality. Standards. Laboratory. Specification of equipment. The material balance for the projected production. Average norms. Environmental protection. Characteristics of water. Basic knowledge in projecting. Technical documentation. Hygienic means for cleaning in place. Equipment for cleaning in place. Laboratory equipment control on the farm, purchase station, raw laboratories and laboratories in the dairy.*Practical lessons*Practical examples of engineering in certain plants. Technical Supervision. Approvals. Probation and proving of technical and technological parameters |
| 1. Teaching methods

Lectures, presentations, demonstrations, consultations, work in dairies and laboratories |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam  | Mandatory | Points |
| Lecture attendance | Yes | 10 | *Theoretical part of the exam/Oral part of the exam/Written part of the exam-tasks and theory* | Yes | 45 |
| Test | Yes | 15 |  |
| Exercise attendance | Yes | 15 |
| *Term paper* | Yes | 15 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Johnson , M., Law ,B.A. | The origins,development and basic operations of cheesemaking technology | Sheffield Academic Press,Sheffield. | 1999 |
|  |  | Law on the construction of the buildings | Off. Gazette RS no. 47/2003 | 2003 |
|  |  | Regulations for the design and construction of facilities for the processing of animal products | Off. Gazette SFRJ no. 53/1989 | 1989 |
|  |  | Regulations on the analysis of the structures and activities on the environment | Off. Gazette no. 61/1992 | 1992 |
|  |  | Code of Hygienic practice for milk and milk products | CAC/RCP 57-2004 | 2004 |
|  |  | Recommended International Code of Practice General Principles of Food Hyigiene | CAC/RCP 1-1969 Rev.4-2003International standarda ISO 22000 | 2003 |
|  |  | Regulations on quality and other requirements for milk, milk products, composite milk products and starter cultures | Off. Gazette no. 26/2002 | 2002 |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationUNDERGRADUATE ACADEMIC STUDIES *ANIMAL SCIENCE* |
| Table 5.2 Course specification |