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| Course: | *MECHANIZATION AND* *AUTOMATIZATION IN ANIMAL HUSBANDRY* |
| Course id: 3OST3O12 |
| Number of ECTS: 6 |
| Teacher: | Miodrag S Zoranović, Mladen S Ivanišević |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures: 3 | Practical classes: 2 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None |
| 1. Educational goal

Establishment of interactive relations between the theoretical and practical principles in the domainApplied technology with supporting technique for growing animals in livestock. |
| 1. Educational outcomes

Insight into the importance of the choice, application and usage of technical solutions within the follow-uptechnology of animal breeding. |
| 1. Course content

Theory lessonsCheck and knowledge in the field of the SI system of measurement units. Power machines with internal combustion engines. Electrical energy with its subdivisions. Electric motors. Alternative sources of electricity and heat in livestock. Basics of Automation in livestock. Machinery and equipment for storing hay. Machinery and equipment for storing green animal feed. Dehydrator cells. Apparatus for preparing granular and root-tuber feed. Supply farm water. Electric fences and other auxiliary devices in livestock. The technique in cattle. Technique to pig farms. Technique on poultry farms. The technique in cattle. Techniques in fisheries. turbines in livestock production. Purification of air and water in livestock. The management of manure.Practical teaching: Exercise, Other modes of teaching, Study research workDemonstrative and budgetary procedures for the above mentioned areas.  |
| 1. Teaching methods

Oral lectures with active participation of students, slides with animations originally formed, films formed by windows movie maker's. Visiting farms and facilities for primary and secondary refinement of basic and secondary products of farming, etc. |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam  | Mandatory | Points |
| Lecture attendance | Yes | 10 | *Oral part of the exam* | Yes | 25 |
| Test | Yes | 30 |  |
| Exercise attendance | Yes | 20 |
| Colloquium | Yes | 15 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  |  | ASHRAE®HANDBOOK | Inch-Pound Edition. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1791 Tullie, N. E, Atlanta | 2009 |
|  | C. H. BURTON and C. TURNER | MANURE MENAGEMENT | Treatment Strategies for Sustainable Agriculture 2nd Edition. Silsoe Research Institute | 2003 |
|  | M. Navaratnasamy and J. J. R. Feddes | Odour Emissions from Poultry Manure/Litter and Barns. Final report submitted to Poultry Industry Council | Alberta Agriculture, Food and Rural Development, J. G. O'Donoghue Building, 7000-113 St., Edmonton, AB, T6H 5T6; Agricultural, Food and Nutritional Science, 4-10 Agriculture/Forestry Centre University of Alberta, Edmonton, AB, T6G 2P5 | 2004 |
|  | Peter H. Brooks | Group Housing of Sows – the European Experience | Department of Agriculture and Food Studies, The University of Plymouth, United Kingdom | 2003 |
|  | Pedersen, S. and Sällvik, K | Climatization of Animal Houses | 4th Report of Working Group on Heat and moisture production at animal and house levels | 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 HUSBANDRY* |
| Table 5.2 Course specification |