|  |  |
| --- | --- |
| Course: | *MICROBIOLOGY IN ANIMAL HUSBANDRY* |
| Course id: |
| Number of ECTS:6 |
| Teacher: | Ass. Prof. Simonida Djuric, PhD  |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures:45 | Practical classes:30 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None |
| 1. Educational goal

To acquaint students with basic characteristics and srtains of microorganisms and their role in digestive organs in domestic animals, fodder production and the production and processing of products of animal origin. |
| 1. Educational outcomes

Acquired knowledge in microbiology are the basis for understanding and monitoring teaching from the feeding of livestock, dairy, hygiene and disease prevention, knowledge of livestock products and others. |
| 1. Course content

Lectures:Morphology of microorganisms. Ecology of microorganisms. Microbial metabolism – aerobic and anaerobic fermentations, growth and reproduction, variability of microorganisms. Microorganisms in digestive organs of domestic animals (bacteria, protozoa, fungi) and their role in digestion. Microorganisms in silage production. Application of microorganisms in nutrition of domestic animals – producers of enzymes and vitamins. Microorganisms that spoil animal feeds. Microorganisms in groceries of animal origin – milk and milk products, meet and meet products.Practical classes:Microscopic techniques. Morphology and determination of protozoa, algae, fungi and bacteria. Assignment of presets and determination of microorganisms in nutrients of plant and animal origin – pathogens - – *E. coli, Salmonella sp., Clostridium sp*.; saprophytes – bacteria, fungi, yeasts. Determination of lactic bacteria. Microbial control of prodacts of animal origin.  |
| 1. Teaching methods

Lectures and Practical classes, Consultations if needed. |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam  | Mandatory | Points |
| Lecture attendance | No |  | *Written part of the exam-tasks and theory* *Oral part of the exam* | YesYes | 3040 |
| Test | No |  |  |
| Exercise attendance | Yes | 2 - 10 |
| *Test* | Yes | 20 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Prescott, L. M | Microbiology, 5th edition | 5th edition, McGraw Hill, NY | 2002 |
|  | Paulsen, P., Bauer, A., Vodnasnky, M., Winkelmayer, R., Smulders, F.J.M.  | Game Meat Hygiene in Focus | Springer | 2011 |
|  | Sampo Lahtinen, Arthur C. Ouwehand, Seppo Salminen, Atte von Wrigh | Lactic Acid Bacteria | CRC Press | 2011 |

|  |  |  |
| --- | --- | --- |
| 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 |