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| Course: | ANIMAL PHYSIOLOGY |
| Course id: 3OST3O14 |
| Number of ECTS: 7 |
| Teacher: | Prof.dr Aleksandar Božić |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures:4 | Practical classes:3 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | Animal morphology  |
| 1. Educational goal

Acquiring knowledge about the functioning of individual organs, organ systems and whole organism of different species of domestic animals. Predicted aspects of teaching provides a clear insight into the physiological processes and students are trained to understand and correctly interpret the various physiological parameters. |
| 1. Educational outcomes

Students achieve an average 75% performance in completing the pre-examination and exams, which enables them easier to understand professional teaching subjects of different disciplines in all branches of animal husbandry. |
| 1. Course content

*Theoretical classes:* Introduction and task items. The physical and chemical principles in the physiology. Physiology of cells and tissues. Physiology of blood. Physiology of immunity. Physiology of heart and circulation. Lymph. Physiology of respiration. Enzymes. Physiology of digestion and resorption. The metabolism of organic and inorganic substances. Thermoregulation. Vitamins. Physiology of the urogenital tract. Acid-base balance. Physiology of secretion. The endocrine system. Physiology of muscle. Physiology of nerve system. Physiology of the senses. Physiology of reproduction. Specifics of the physiological processes of birds and fish.*Practical classes:* Introduction. Blood sampling and preparation for analysis. Determination of the number of erythrocytes. Determination of the number of leukocytes and leukocytes formulas. Determination of hemoglobin concentration. Determination of blood groups and determining the clotting time. Measurement of blood pressure. Observation of the circulatory system and heart. Breathing - lung volumes, spirometry. Digestion in the mouth. Physiology of digestion of non-ruminants. Physiology of digestion of ruminants. Physiology of mammary gland. Metabolism. Vitamins. The endocrine system. Physiology of the kidney. Physiology of nerve and muscle. Senses. Physiological parameters in general and comparative physiology of birds and fish. |
| 1. Teaching methods

Verbal, interactive methods (CD presentations, quiz), individual and group laboratory work, microscopy.  |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam  | Mandatory | Points |
| Lecture attendance | Yes | 5 | Written part of the exam-tasks and theory | Yes | 20 |
| Test | Yes | 30 | Oral part of the exam | Yes  | 30 |
| Exercise attendance | Yes | 5 |
| Seminar | Yes  | 10 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Stojić, V. | Veterinarska fiziologija, | Naučna knjiga, Beograd. | 1996;1999;2004 |
|  | Sherwood, Lauralee | Human physiology- from cells to sistems. | Thomson LARC, USA, | 2004. |
|  | Sjaastad, QV, Hove, K., Sand, O .:  | Physiology of domestic animals | Scandinavian veterinary Press | 2003 |
|  | Sherwood, Lauralee, Klandorf, H. Yancey, PH.  | Animal physiology - from genes to organisms | Thomson LARC, USA | 2005 |
|  | Todorovic-Joksimovic, M., Božić, A .:  | Praktikum iz fiziologije domaćih životinja | Faculty of Agriculture, Belgrade - Zemun, Novi Sad | 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 |