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| Course: | *REPRODUCTION IN DOMESTIC ANIMALS*  |
| Course id: 3OСT4O15 |
| Number of ECTS: 6 |
| Teacher: | Blagoje L. Stančić, PhD, Full Professor and Saša B. Dragin, PhD, Associated Professor. |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures: 60 | Practical classes: 30 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | Animal Physiology and Basic Animal Nutrition |
| 1. Educational goal

 Detailed introduction to contemporary theoretical and practical knowledge in the field of reproductive physiology, biotechnological methods of reproductive processes control, as well to technologies of breeding animals reproductive exploitation in certain mammal species (horses, cattle, sheep, goats and pigs), as well as the basic types of domestic poultry (chickens, geese, ducks and turkeys). The application of these findings for understanding and practical problem solving from other related disciplines of animal science and practice. |
| 1. Educational outcomes

 Qualifications of students to independently apply modern biotechnology methods to managing reproductive functions of domestic mammals and birds. To apply optimal reproductive technology exploitation of domestic animals, in certain conditions, and technological systems of livestock production. That is adopted by an independent performance assessment of production and to independently solve problems of reproduction in domestic animals. After completion of the study, acquired knowledge can be successfully transferred to other persons. Student is qualified for further studies at higher levels of education in the field of biotechnological sciences. |
| 1. Course content

*Theoretical lessons*A. General physiology of reproduction in domestic mammals: Endocrine regulation of reproductive function; Functional morphology and histology of male and female sexual organs; Physiology of female sexual function; Physiology of male sexual function. B. Special physiology of reproduction of some mammals and birds species: cattle reproduction; sheep and goats reproduction; pig reproduction; horse reproduction; reproduction of domestic birds (chickens, geese, ducks and turkeys). C. Biotechnology of reproduction: artificial insemination of cattle, pigs, sheep, goats and horses; embryo transplantation; manipulation of gametes and early embryos *in vitro*; induction and synchronization of estrus; induction of superovulation; induction and synchronization of estrus outside the breeding season in sheeps, goats and mares; induction and synchronization of parturition; Methods of pregnancy diagnosis; Sex determination of gametes and embryos.*Practical lessons*a) Laboratory exercises: Anatomy and histology of male and female sexual organs; Reproductive Endocrinology; Semen quality control; Dilution of sperm and insemination doses formation; Methods for estrus detection; The development of the fetus and fetal membranes; Methods of pregnancy diagnosis; Normal parturition; Analysis and evaluation of reproductive efficiency of the herd.b) Field exercises: Perform on livestock farms and the experimental farm of the Department of Animal Husbandry, and include accommodation and food systems of certain categories of domestic animals; Artificial insemination of certain species of domestic animals; Hygiene and health care for certain categories of breeding animals. |
| 1. Teaching methods

 Lectures, Practical classes (laboratory and farms); Consultation,  |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points (50) | Final exam  | Mandatory | Points (50) |
| Lecture attendance | Yes | 5 | *Oral part of the exam (practical and theoretical)* | Yes | 50 |
| Test | Yes | 40 |  |
| Exercise attendance | Yes | 5 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Станчић, Б. | Репродукција домаћих животиња (уџбеник).  | Пољопривредни факултет, Нови Сад.  | 2008. |
|  | Драгин, С., Станчић, И., Ердељан, М. | Репродукција домаћих животиња (практикум).  | Пољопривредни факултет, Нови Сад. | 2011. |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationBASIC ACADEMIC STUDIES Animal Production |
| Table 5.2 Course specification |