



Course title: BIOTECHNOLOGY OF BOVINE REPRODUCTION

ECTS credit allocation (and other scores): 1,5

Semester: autumn

Level of study: ISCED-7- long-cycle programmes (EQF-7)

Branch of science: Agricultural sciences

Language: English

Number of hours per semester: 15

Course coordinator/ Department and e-mail: Tomasz Janowski, jantom@uwm.edu.pl

Type of classes: classes and lectures

Substantive content

CLASSES: During practical classes students gain the skill of methods to control ovarian function, technics of collection of oocysts and embryos, methods of oocysts and embryos evaluation and embryo transfer technics.

LECTURES: General aim of the lectures is to introduce following issues: legal provisions regulating used methods of biotechnology in cows, hormonal regulation of the cycle, growing and development of follicles, factors influencing development and maturity of oocytes, methods of evaluation of oocytes, biology of fertilization and embryo development, methods of superovulation and synchronization of the cycle, embryo transfer, methods of embryo evaluation, technics of in vitro fertilization.

Learning purpose: Gaining the knowledge and skills concerning biotechnics in cattle reproduction, mainly embryo transfer

On completion of the study programme the graduate will gain:

Knowledge: After the course a student knows biology and hormonal regulation of growing and development of ovarian follicles and oocytes, rules and methods of embryo transfer and in vitro fertilization

Skills: After the course a student knows practically a technics of evaluation of the ovary, collection and evaluation of oocytes and embryos, and technics of embryo transfer

Social Competencies: A student shows initiative and skills of practical activities connected to performing and introduction of embryo transfer and related methods into cattle reproduction. Can cooperate with the breeders and veterinary inspection

Basic literature: 1. Bielański, A., Tischner, M 1997. Biotechnologia rozrodu zwierząt domowych. Wyd. Drukrol, Kraków, 1-631. 2. Krzymowski, T. (red.). Biologia rozrodu zwierząt. Cz. I, Wyd. UW-M Olsztyn, 1-762.

Supplementary literature:-

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 17

Student's independent work: 20,5