Course Unit Descriptor

Study Programme: Veterinary medicine

Course unit title: Stress and distress – physiology and pathophysiology of adaptation to stress stimuli

Course Unit Code: 3ДВМ2И22

Name of Lecturer(s): Branislava Belić, Marko Cincović

Type and Level of Studies: Doctoral studies

Course Status (compulsory/elective): Elective

Semester (winter/summer): winter

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face to face

Number of ECTS Allocated: 6

Prerequisites: None

Course Aims:

The goal is for students to learn that stress is an inevitable cause of numerous adaptations and when stress can act when it becomes pathological and distress, as well as to meet the exact indicators of stress reactions

Learning Outcomes:

Students at the end of the course will be referred to the mechanism of stress reactions, their importance in the pathogenesis of health disorders and measures of prevention and protection of animals from stress

Syllabus:

General adaptive mechanism; Stress response; Distress and its manifestations; Endocrine changes in stress; Metabolic changes in stress; Immunological changes in stress; Reproductive changes in stress; Cellular adaptation to stress; Stress during intrauterine development; Stress and behavioral changes; Acute and chronic stress; Genetic selection of stress sensitivity; Test methods for assessment of stress response; Stress of some kind of animal in their daily living conditions; Well-being as the absence of stress; Prevention of stress animals.

Required Reading:

- 1. Hristov Slavča, Bešlin Rade: Stres domaćih životinja, Poljoprivredni fakultet Zemun, Beograd, 1991
- 2. Đoković Radojica: Endokrini status mlečnih krava u peripartalnom periodu, Agronomski fakultet Čačak, 2010.
- 3. Cincović R.Marko: Toplotni stres krava- fiziologija i patofiziologija, beograd, 2010.
- 4. Šamanc Horea, Kirovski Danijela: Adrenokortikalni sistem goveda, Beograd, 2008.
- 5. Moberg G.P., Mench J.A.: The biology of animal stress, CABI publishing, 2000.
- 6. Contrada R.J., baum A.: The handbook of stress science, Springer, 2011.
- 7. Nelson R.J. et al: Seasonal patterns of stress, immune function, and disease, Cambridge 2002.

Weekly Contact Hours:	Lectures: 45	Practical work: 45
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Teaching Methods:

Oral presentations using audio-visual techniques; written communication - Seminars;

Practical field work and laboratory analysis and case studies.

Knowledge Assessment (maximum of 100 points):				
Pre-exam obligations	points	Final exam	points	
Active class	10	oral exam	50	
participation				
Practical work	10			
Preliminary exam(s)	30			
Seminar(s)				
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam,				

project presentation, seminars, etc.