

Study program: Organic crop and livestock production			
Type and level of study: Bachelor academic studies			
Course Title: HARMFUL SUBSTANCES IN THE FOOD CHAIN OF ANIMALS			
Teachers: Dr. Meho S. Bašić, Associate professor, dr Midhat E. Jašić, Full professor			
Status: Elective 6, VIII semester			
ECTS: 7			
Prerequisite: None			
The goal of course Introduce students to the ways and possibilities of contaminating organism of animals various harmful substances present in the food, water, animals, and the impact of these substances on the health of animals, safety and quality of animal products.			
The outcome of the subject Expertise in identifying the disorder in animals resulting from the introduction into the body of food and water, hazardous substances, as well as familiarization with modern analytical methods for determining the presence in food, water, organs and tissues, toxic metals, pesticides and mycotoxins			
Syllabus <i>Theoretical study –</i> Animal health disorders arising as a result of improper diet and food intake of toxic substances in the body of animals; Nutritional deficits and surpluses of nutrients as causes disorder animal health; Deterioration and harmfulness of animal feed, physical, chemical, biological factors, bacteria, parasites, fungi; The toxins of microorganisms - bacteria, plant toxins - Phytotoxin, toxins animals; The toxins fungi; Aspergil-toxins, Penicilio-toxins; Fuzario toxins; Organophosphorous poisoning of animals and organochlorine compounds, carbamates, herbicides rodenticidinma; Poisoning animals inorganic compounds and metals; Heavy metals in air, water and land plants. Poisoning animals lead, mercury, cadmium and arsenic <i>Practical classes –</i> Physical, chemical, biological and analytical methods for determining toxic substances; organophosphorus and organochlorine compounds and rodenticides, sodium chloride, urea, nitrites and nitrates and toxic metals; Analytical method of determining aflatoxin B1, B2, G1, G2, ochratoxin, zearalenone, fumonisin and trichothecenes toxins. First test and a test of practical training.			
Literature Fink-Gremmels (2012): Animal Feed Contamination, 1st Edition Effects on Livestock and Food Safety. Woodhead Publishing The risk of contamination of food with toxic substances present in animal feed (2010) C.A. Kan, G.A.L.			
Number of lectures: 6			Other Classes
Lectures: 3	Practices: 3	Other forms of teaching:	
Student research work:			
Teaching methods: The method of oral presentations and discussions, written work (seminars and colloquium). The method of practical work on animal farms in clinical and chemical analytical laboratories.			
Score (maximum 100 points)			
Pre-commitments	Poens	The final exam	Poens
Activity during lectures	10	Written exam	
Practical classes	10	Oral examination	30
Colloquia	40		
Seminars	10		
<i>Total</i>	70		30