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| Course: | Quality and safety of animal products |
| Course id: 3OST7O32 |
| Number of ECTS: 5 |
| Teacher: | Igor M. Jajić, PhD, Associate Professor |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures: 3 | Practical classes: 2 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None/navesti ako ima |
| 1. Educational goal

To familiarize students with the most important factors of livestock products quality. Introducing students to the field of food safety, understanding of prerequisite programs (GMP and GHP), which are the basis of efficient food safety management through the application of HACCP. Acquiring knowledge about the negative influence of the major animal products contaminants. |
| 1. Educational outcomes

Acquired knowledge level ensures participation in the production of livestock products that are safe for human health, through strict compliance with applicable laws and regulations. Independently, finding and using resources needed to solve the problem of health safe food production. Acquired basic knowledge of different chemical and microbiological pollutants in raw materials, food and water, their sources and consequences to the health and quality, as well as measures to be taken to avoid such contaminants in produced livestock products. |
| 1. Course content

Theoretical classes: Quality, definitions, history. Quality factors: sensory, technological, nutritional, hygienic, toxicological and ethical. Meat: importance, technological and nutritional quality of meat. Biochemical processes in muscle postmortem, post mortal glycolysis and maturation of meat. Eggs: structure and chemical composition, preserving the quality of eggs, processing. Honey: chemical composition, antibacterial properties, honey types according to their origin and method of obtaining. The most important contaminants of honey. Good manufacturing practice (GMP), good hygiene practices (GHP), hazard analysis and critical control points (HACCP). Legislation regarding food safety. The European Food Law (EC 178/2002), EFSA, RASFF. ISO standards series 9000 and 22000. Food Safety Law of the Republic of Serbia (41/2009). Toxicological quality food. Food contaminants: pesticides, polychlorinated biphenyls, heavy metals, dioxins, mycotoxins.Practical classes: exercise, other forms of instruction, study research: Determination of the water holding capacity of meat. Determination of glycogen, the amount of connective tissue and total pigments in meat. The color of food, determination of meat color. Determination of fat-soluble vitamins. The quality of honey: determination of pH in honey, proving starch and hydroxymethyl furfural in honey. Toxicological food quality, determination of mycotoxins and heavy metals. |
| 1. Teaching methods

Lectures, Practical classes, Consultations, study, research work |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam (izabrati) | Mandatory | Points |
| Lecture attendance | Yes | 5 | *Oral part of the exam* | Yes | 50 |
| Test | Yes | 40 |  |
| Exercise attendance | Yes | 5 |
| *Ovde se mogu pojaviti i kolokvijumi i seminarski rad (npr. Test, Term paper)* | No |  |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Jajić, I. | Kvalitet i bezbednost stočarskih proizvoda - Praktikum | Poljoprivredni fakultet, Novi Sad | 2013 |
|  | Rede, R., Petrović, LJ. | Tehnologija mesa i nauka o mesu | Tehnološki fakultet, Novi Sad | 1997 |
|  | D’Mello, J.P.F. | Food Safety Contaminants and Toxins | Cab International, Wallingford, UK | 2003 |

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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 |