



Course Unit: 93504 – Animal origin raw materials

Year 1 Semester 1 ISCED Code: 811 ECTS: 4

Type of Course Unit: Compulsory Delivery Mode: Face-to-face Language of Instruction: Portuguese

COURSE COORDINATOR: António Rosário Oliveira

HOURS OF WORK

TOTAL HOURS	Contact Hours								Hours in autonomous work
	Theory	Theory and practice	Practical and laboratory work	Field work	Seminar	Internship	Tutorial guidance	Other	
100		60							40

Prerequisites (if applicable): Not applicable

LEARNING OUTCOMES (knowledge, skills and competence)

On successful completion of this course unit, the student should be able to:

The student for school success (skills), this course profile general, have to acquire knowledge and demonstrate them through critical analysis of scientific and technical nature, revealing the general concepts and specific areas of scientific and cross of the respective unit curriculum at both laboratory and field with study and interpretation of case studies (case study), which enable students to acquire key skills for professional performance in these scientific areas of the course.

CONTENTS

Ministering to students the fundamental concepts of animal husbandry in order to produce raw materials salubrious. Introduction to Animal Science New Order and the foundations of their science. General anatomical and physiological basis of meat production (function creatopoiética), milk (depending lactopoiética), eggs and fish and honey, for manufacturing industries. Animal Identification and importance of Electronic Animal Identification Act (IDEA). Operating System, general husbandry (feeding, breeding, health and hygienic-prophylactic) and specific for each livestock species and biosafety. Impact of transport on the quality of raw materials and final products of animal origin. Future perspectives of the impact of economic globalization, knowledge society, ICT, the farm biosecurity in global food security of the raw materials of animal origin.

DEMONSTRATION OF THE CONTENTS COHERENCE WITH THE COURSE UNIT'S LEARNING OUTCOMES

Introduction and fundamentals of the scientific areas of livestock production to obtain raw materials of animal origin, taking into account the New Order Animal Science (NUT). General anatomical and physiological bases of meat production (function creatopoiética), milk (depending lactopoiética), eggs and egg products, fish and their derivatives and honey for manufacturing industries. Biosafety in the ranks of livestock, animal identification (EID animal - IDEA) and Information and Communication Technology (ICT) and fundamentals of traceability and the importance of the Hygiene Package. Quality products and value-added (food / medicine, nutraceutical and functional). Technological innovations in hygiene, sanitation, food safety and quality of the ranks, particularly in livestock. Impact of economic globalization, knowledge society, ICT, robotics telematics, the farm's biosecurity and food safety technology in the world of raw materials of animal origin.

TEACHING METHODOLOGIES

Lectures (contact collective), practices, research literature online to update the scientific and technical development of group work. Analysis and case study method of teaching with tutorial. Presentation of analysis and interpretation, not only of research articles and / or dissemination of scientific and technical innovation and practical, but also in laboratory practice-oriented study or analysis and interpretation of data and results of field work related to the course.

DEMONSTRATION OF THE COHERENCE BETWEEN THE TEACHING METHODOLOGIES AND THE LEARNING OUTCOMES

Ministering to students the fundamental concepts of animal husbandry in order to produce raw materials salubrious. Introduction to Animal Science New Order and the foundations of their science. General anatomical and physiological basis of meat production (function creatopoiética), milk (depending lactopoiética), eggs and fish and honey, for manufacturing industries. Animal Identification and importance of Electronic Animal Identification Act (IDEA). Operating System, general husbandry (feeding, breeding, health and hygienic-prophylactic) and specific for each livestock species and biosafety. Impact of transport on the quality of raw materials and final products of animal origin. Key performance parameters of economic importance. Fundamentals certification of farms. Application of the principles contained in the package hygienic standards and traceability in the field (monitoring and screening of waste and other prohibited substances in vivo production) seeking certification of the final products. Importance of the IDEA of Robotics, Telematics and Information and Communication Technologies (ICT) in the production of raw materials of animal origin. Impact of technical and technological innovations in production and animal breeding, having regard to hygiene, sanitation, traceability aimed at food safety and quality end products in the ranks of livestock. Future perspectives of the impact of economic globalization, knowledge society, ICT, the farm biosecurity in global food security of the raw materials of animal origin.

EVALUATION METHODS

Frequencies and / or ongoing assessments, written assignments and individual groups of students with issues and matters that concern the final exam (100%) written and / or oral for this course. This assessment methodology above is always dependent on the Internal Regulation School (REI) approved on 08-09-2010, approved by the competent organs of the statutorily IPBeja and approved by the President.

MAIN BIBLIOGRAPHY

- FORSYTHE, S. J. (2003). Alimentos Seguros: Microbiología. Editorial Acribia. Zaragoza, 410 pp.
- OLIVEIRA, A. R. (2000). Estudio de las características de la canal y de la grasa del cerdo Alentejano (*Sus ibericus*). Tese Doctoral. UEX, Facultad de Veterinaria, Cáceres, 168 pp.
- LAWRIE, R. A. (2005). Ciência da Carne. 6.ª Edição. Artmed. Porto Alegre, 384 pp.
- Regulamentos (CEE) n.º 2081/92 e 2082/92; EN 45011 e ISO 22.000 (2005).
- PURNELL, G. (1998). Robotic equipment in meta industry. Meat Sci, Vol. 49 (Sup.1): S297-S307.
- SIKORSKI, Z.E.(1994).Tecnología de los alimentos do mar: recursos, composición nutritiva, y conservación. Ed A. Zar, 342 pp.
- VACLAVIC, V. A. (2002).Fundamentos de ciencia de los alimentos. Ed. Acribia, Zaragoza, 508 pp.
- VENTANAS, J. (2001). Tecnología del Jamón Ibérico. De los sistemas tradicionales a la explotación Racional del sabor y el aroma. Ed. Mundi-Prensa. Madrid, Barcelona, México. 512 pp.

Year of implementation: 2013/2014 | Date of approval by the Technical-Scientific Board: 2012-10-10