



Co-funded by the
Erasmus+ Programme
of the European Union



Project “Improving skills in laboratory practice for agro-food specialists in eastern Europe» (Ag-Lab)

Program Erasmus +, project KA2 n° 586383-EPP-1-2017-1-SI-EPPKA2-CBHE-JP (2017-2978/001-001)

Speciality: Technology of production and processing of animal products
Specialization: Laboratory practice
Professional competences / References

General competences

1. Ability to plan, to organize and to carry out scientific researches, to treat, to publish and to patent their results.
2. Ability to analyse and to control fodders quality and nutrition levels of animals, birds, fishes and bees.
3. Ability to develop, to organize and to carry out measures aimed to the improvement of productivity of animals, birds, fishes and bees, to the improvement of their products quality control and production efficiency.
4. Ability to organize and to control measures aimed to the improvement of breeding activity in animal husbandry.
5. Ability to apply knowledge in modelling and construction of technological processes in production and processing of animal products.
6. Ability to organize and to control measures aimed to the improvement of professional knowledge of specialists in the field.
7. Ability to organise entrepreneurship and financial activity and to evaluate economic efficiency of production and processing of animal products.
8. Ability to apply in practice the base knowledge in management and legal provision of production and processing of animal products.
9. Ability to organize and to control different systems and methods of processing of animal products.
10. Ability to apply knowledge in biological, physiological and biochemical peculiarities of different animals and birds' species and their products for the selection of production technologies and for research activity.

Competences for laboratory practice

11. *General knowledge in organization and functioning of laboratories (general requirements for laboratories (GPL), certification and accreditation of laboratories, metrological provision, international standards ISO 17025, ISO 9001, ISO 14001, ISO 45001, validation of methods, European regulation related to the laboratory practice).*
12. *Knowledge of different methods of laboratory researches (gas and liquid chromatography, PCR, diagnostic by atomic absorption, ELIZA, DNA sequence, biochemical methods of analyses).*
13. *Ability to apply procedures for confirmation of laboratory diagnostic efficiency (internal and cross audit, verification, calibration), quality assurance of laboratory researches (intra and inter-laboratory control).*
14. *Ability to apply the rules of the laboratory biosecurity and use of animals, sampling of biological materials.*
15. *Ability to apply procedures of calibration and verification of measurement equipment.*
16. *Ability to organize measures for laboratory researches quality insurance at pre-analytical, analytical and post-analytical stages.*
17. *Knowledge of procedures and ability to organize measures for recycling of wastes, used samples, materials and chemicals.*
18. *Knowledge of documents management procedures.*
19. *Ability to define, to evaluate and to control biological, chemical and physical risks along food chain, to develop monitoring system for every critical point of control at foodstuffs production; to carry out risks assessmentⁱ.*
20. *Ability to develop strategies for obtaining secure products of animal and plant origin, for production, transport and selling surveillance and control according to HACCP system.*

ⁱ As in the veterinary paragraphs 19 and 20 concern mainly processing enterprises, so it can be facultative.