# Description of the study programme Food Hygiene in the third level of fulltime form of study in Slovak language

The name of the university:
University of Veterinary Medicine and Pharmacy in Košice
The seat of the college:
Komenského 73, 041 81 Košice
College identification number:
00397474

The college's authority to approve of the study programme: Accreditation Committee of UVMP in Košice

Date of approval or modification of the study programme:

22. 8.2022

Date of the last change to the study programme description:

11.8.2022

Decision No. 2015-18852/46465:3-15A0 of 30th October 2015, Reaccreditation grants the right without time limitation

ID of the proceeding: 16727

The name of the university: University of Veterinary Medicine in Košice

The name of the study programme: Food Hygiene

The level of the study: Level 3 Code of the study programme: 12242

## 1. Basic data about the study programme

a) The name of the study programme and the number according to the register of study programme:

Food Hygiene, code 12242, Decision number 2015-18852/46465:3-15A0

- b) Level of higher education and ISCED-F code of the level of education: Level 3/864
- c) Venue of the study programme: The University of Veterinary Medicine in Košice, Komenského 73, 041 81 Košice
- d) The field of study in which a higher education is obtained by completing the study programme, or a combination of two study fields in which a higher education is obtained by completing the study programme, ISCED-F code of the field: Veterinary medicine/0841
- e) Type of study programme: Academically oriented
- f) Academic title awarded. *Philosophiae doctor* (abbreviated PhD.)

- g) Form of study: Full-time
- h) The language in which the study programme is conducted: Slovak language
- i) Standard length of study expressed in academic years:4 academic years
- j) Capacity of the study programme (planned number of students), actual number of applicants and number of students: according to the dissertation topics, the actual number of applicants in the last 6 years: 7; the number of PhD students in the last 6 years: 7
- k) Information about the study programme: https://qa.uvlf.sk/sprg\_info/?sprg\_id=8&ar=20222023

## 2. Graduate profile and learning objectives

a) The learning objectives achieved in the study programme Food Hygiene, Level 3 are methodologically based on the European Qualifications Framework for Lifelong Learning (EQF). This defines the requirements for learning outcomes for knowledge, skills and competences. For level 8, the learning outcomes required are highly specialised knowledge, some of which is at the forefront of the field of work or study and underpins original and creative thinking and/or research; basic knowledge of all the related fields. The field requires solving problems in which many related factors are at work; learning is often highly specialised. The focus of the courses, the core knowledge and the required skills are described in detail in the syllabi of the compulsory courses. Additional knowledge is achieved by completing the other compulsory optional courses of the study programme. By completing the core courses, the graduate will gain knowledge about the importance of hygiene and quality of production of food of animal origin for their health safety. The students will acquire the latest methods of food production technology, while acquiring the latest scientific knowledge in the field of food production.

Graduates of the study programme Food Hygiene are qualified to Seminar the profession of a veterinary surgeon specialising in the hygiene, quality and health safety of produced food after completing the 3rd level of higher education. Graduates are proficient in scientific methods of research and development, focusing on the research in the field of hygiene and quality of food of animal and plant origin, development of food technology, laboratory diagnostic methods, development of food legislation, etc. The graduate can create and formulate new hypotheses, judgments and strategies to further develop the field they specialize in, evaluate theories, concepts and innovations, apply own findings resulting from theoretical analysis and own scientific research of complex and interdisciplinary nature, design, verify and implement new research and working procedures. The graduate employs critical, independent and analytical thinking, and is able to step up and draw up documents that would help the society move forward in terms of hygiene and quality of produced food. The graduate is able to present and publish his/her evidence-based research results to the professional and scientific community. The student is able to design, validate and implement new research and working methods, based on the results obtained, which are then presented and used in the application of new scientific and working practices. He/she is able to determine the focus of research and coordinate a team in the scientific field in research organisations, as well as to manage the solution of problems in food practice. In proportion to the impact of the issues studied, the need for professionals and the relevance of education in the field of specialisation of food hygiene increases.

Responsibility and autonomy, defined for EQF Level 8 are the ability to display considerable authority, innovation, independence, scientific and professional integrity and a sustained commitment to developing new ideas or practices that are at the forefront of a given work or learning environment, including research.

The graduate of the Food Hygiene programme is capable of independent, critical and analytical thinking. He/she takes into account social, scientific and ethical aspects when formulating research intentions and interpreting research results. The results of his/her own creative work contribute to the development of science, scientific knowledge and the application of acquired knowledge in practice. The graduate presents the results of research and development independently to the professional community, can determine the focus of research and coordinate a team in scientific investigation, independently design, validate and implement new research and working practices based on own outputs and findings.

b) Graduates of the study programme Food Hygiene, 3rd level can hold any position in the independent research in the field of production of safe and quality food, management of hygiene of food processing plants, as well as management of production technology in food processing companies. Graduates are prepared to work in accredited laboratories in the field of food analysis, as well as to provide consultancy in the field of hygiene of food production and sales.

Graduates of PhD studies will also find employment in:

- 1) data-oriented organizations, statistical and information processes, correct setting of hygiene conditions and processing of raw materials of animal and plant origin,
- 2) management of food processing enterprises with a focus mainly on the hygiene of food production, evaluation of raw materials entering the production process and their impact on the quality of products of animal origin,
- 3) advice and oversigh in the field of hygiene of food production and sale, feed production, welfare compliance, advice and prevention of livestock diseases.
- c) Relevant external interested parties who have provided a statement or a favourable opinion on the compliance of the acquired qualification with the sector-specific requirements of the profession: State Veterinary and Food Administration of the Slovak Republic https://qa.uvlf.sk/vsk/docs/vzs\_hpIIIst\_svpssr.pdf

#### 3. Job prospects

- a) On the basis of the previous long-term experience with the graduates of the study programme Food Hygiene, 3rd degree, we can state that graduates find employment mainly in the Slovak Academy of Sciences, as well as at workplaces of the State Veterinary and Food Administration of the Slovak Republic and also in the private sphere in the field of food production as well as consultancy in the field of hygiene of food production and sales.
- b) Examples of successful graduates of the study programme Food Hygiene, 3rd degree are: MVDr. Dana Marcinčáková, PhD., MVDr. Jana Šimková, PhD., MVDr. Lýdia Mesarčová, PhD., PharmDr. Adriána Fečkaninová, PhD., MVDr. Boris Semjon, PhD. či MVDr. Martin Bača, PhD.
- c) Evaluation of the quality of the study programme by employers (feedback): the UVMP has prepared questionnaires on graduates for employers.

#### 4. Structure and content of the study programme

- a) The rules for the formation of study plans in the study programme Food Hygiene are based on the general provisions contained in Article 8 of the internal regulation Study Guidelines of the UVMP, Part B.
- b) The recommended framework study plan for full-time: https://qa.uvlf.sk/ais/sp/?ar=2022-2023&sprg\_id=8

The dissertation examination may be taken by a student who has achieved 50 credits for five CSs and at least 10 credits for two selected OCSs during the study period, no later than 24 months from the start of the PhD studies. A minimum of 240 credits is required for graduation.

- c) The study plan includes:
  - listed individual parts of the study programme (compulsory courses and compulsory optional courses),
  - profile subjects are marked in bold and with an asterisk in the study plan,
  - for each educational part (course), the learning outcomes and the related criteria and rules for their assessment are defined in the information sheet of course so that all the educational objectives of the study programme are met,
  - for each educational part of the study plan (course), the course information sheet sets out the learning activities used that are suitable for achieving the learning outcomes,
  - the course information sheet lists the methods by which the learning activity is carried out.
  - the course information sheet lists the course syllabus,
  - the course information sheet lists the student's workload,
  - the credits allocated to each section based on the learning outcomes achieved and the associated workload,
  - the course guarantor is identified and the course information sheets, if applicable, also identify other persons providing the courses,
  - the place of providing of the course (if the programme of study is delivered at more than one site).

# The course information sheets for the Food Hygiene programme are available via links directly in the study plan:

https://qa.uvlf.sk/ais/sp/?ar=2022-2023&sprg\_id=8

- d) The number of credits which must be earned to complete the study and other conditions that the student must fulfill to graduate, including the conditions of state exams, rules for retaking courses and rules for extension, interruption of studies:
  - The condition for the proper completion of studies is obtaining 240 credits, which include credits for passing the dissertation examination and defending the dissertation. Other conditions that the student must fulfill to complete the studies, including the conditions of state exams, rules for retaking courses and rules for extension, interruption of studies are listed in Articles 2, 15, 18, 19 and 29 of the <u>Study Guidelines of the UVMP</u>, Part B.
- e) Conditions for passing individual parts of the study programme and the student's progress in the study programme :
  - number of credits per core courses required for proper completion of the studies/completion of part of the study: 50

- number of credits for compulsory courses required for proper completion of the studies/completion of part of the study: 10,
- number of credits for the dissertation examination: 20
- number of credits for the defence of the dissertation thesis required for proper completion of studies: 30
- f) Rules regarding student evaluation and the possibility of repeating exams: UVMP in Košice has described the rules regarding student evaluation and the possibility of repeating exams in Articles 17, 18 and 25 of the Study Guidelines of the UVMP, Part B.
- g) Conditions for the recognition of studies or part of studies:
  UVMP in Košice addresses the conditions for recognition of studies or parts of studies in
  Articles 19, 38 and 42 of the Study Guidelines of the UVMP, Part B.

# h) Topics of the PhD theses of the study programme:

Name of the topic of the dissertation in full-time form in Slovak language	AY	Topics
Aplikácia červenej fermentovanej ryže v potravinárskom priemysle a	2002/2003	+
možnosti jej využitia		
Štúdium vlastností enterohemoragických izolátov Escherichia coli O157:H7	2004/2005	+
Konfirmácia rezíduísulfónamidov v potravinách živočíšneho pôvodu	2004/2005	+
kyselinou para-aminobenzoovou		
Objektivizáciaúloh a požiadaviek senzorického hodnotenia potravín	2004/2005	+
Antibiotická rezistencia izolátov stafylokokov z potarvín živočíšneho pôvodu	2004/2005	+
Štúdium vlastností a možnosti eliminácie toxikogénnych plesní a	2006/2007	+
mykotoxínov		
Screening rezíduí aminoglykozidových a beta-laktámových antibiotík v	2006/2007	+
mlieku		
Kvalita a bezpečnosť nebovinných druhov mliek (kozie mlieko)	2007/2008	+
Vplyv glazúrovania a antioxidantov na bezpečnosť a kvalitu rýb	2007/2008	+
Kvalita a bezpečnosť mäsa zveri	2008/2009	+
Štúdium faktorov patogenity a rezistencie voči antibiotikám u potravinových	2008/2009	+
izolátov stafylokokov		
Sledovanie vybraných ukazovateľov bezpečnosti a kvality včelieho medu	2009/2010	+
Štúdium vybraných vlastností čistých mliekarských kultúr v procese výroby	2009/2010	+
mliečnych výrobkov		
Vývoj nového dezinfekčného prostriedku a jeho využitie v potravinárstve	2009/2010	+
Výskyt antimikrobiálnej rezistencie u izolátov stafylokokov z potravín	2009/2010	+
živočíšneho pôvodu		
Konfirmácia rezíduí antikokcidík v potravinách živočíšneho pôvodu	2009/2010	+
Mikrobiologická identifikácia rezíduí antibiotík v potravinách živočíšneho	2010/2011	+
pôvodu		
Antibiotická rezistencia a faktory virulencie baktérií rodu enterococcus	2011/2012	+
izolovaných z mlieka a mliečnych výrobkov		
Analýza fyzikálnych a biochemických charakterostík zrecieho procesu mäsa	2011/2012	+
zveri vo vzťahu ku kvalite mäsa		
Detegovanie a charkteristiky prospešnej mikroflóry v syroch počas	2011/2012	+
technologickej výroby		
Vývoj HACCP v Slovenskej Republike a jeho dopad na funkčnosť systémov	2012/2013	+
zabezpečenia hygiena potravín živočíšneho pôvodu		
Rezíduá antibiotík v potravinovom reťazci	2012/2013	+
Využitie probiotík v akvakultúre lososovitých rýb	2013/2014	+
Hygienické a zdravotné aspekty chovu kôz vo vzťahu ku kvalite mlieka	2013/2014	+
Vplyv technológie výroby na kvalitu tradičných syrárskych špecialít	2014/2015	+
Živočíšne tuky a ich vplyv na zdravotný stav človeka	2014/2015	+

Účinok skrmovania fermentovaných biokrmív, obohatených o významné polynenasýtené mastné kyseliny a pigmenty, na kvalitu produkovaného	2015/2016	+
hydinového mäsa		
Post-screening rezíduí kokcidiostatík v potravinách živočíšneho pôvodu	2017/2018	+
Štúdium faktorov ovplyvňujúcich fyzikálne a biochemické charakteristiky	2017/2018	+
zrecieho procesu mäsa hydiny		
Sledovanie vonkajších a vnútorných vplyvov na kvalitatívne a hygienické	2018/2019	+
vlastnosti surového kravského mlieka		
Hodnotenie potenciálne rizikových faktorov pri spracovaní kávy z pohľadu	2019/2020	+
jej kvality a bezpečnosti		
Aplikácia fermentovaných produktov a humínových látok vo výžive hydiny	2020/2021	+
na zlepšenie zdravia zvierat a produkciu bezpečných potravín		
Humínové látky ako alternatíva použitia kokcidiostatík vo výžive hydiny	2021/2022	+

#### i) UVMP in Košice has laid down:

- the rules for assigning, processing, opposing, defending and evaluating dissertation theses in Articles 1, 8, 9, 10, 25, 26, 27 and 28 of the Study Guidelines of the UVMP, Part B,
- possibilities and procedures for participation in student mobility in Article 42 of the internal regulation <u>Study Guidelines of the UVMP</u>, Part B,
- Code of Academic Ethics in the internal regulation
   <u>Disciplinary\_Procedure\_for\_Students</u>, in the internal regulation UVMP Employee
   <u>Code of ethics for employees of the UVMP</u> and in the internal regulation <u>Student</u>
   code of ethics at the UVMP,
- procedures applicable to students with special needs in Part II, Article 2, point 7; Article 3, point 12 of the Study Guidelines of the UVMP, Part B,
- the procedures for filing complaints and appeals by the student are specified, in addition to the Study Regulations of UVMP in Košice, in particular in the internal regulation Directive on the handling of complaints at the UVMP.

#### 5. Information sheets of study programme courses

The information sheets of individual courses of the study programme have the structure established by the Decree of the Ministry of Education of the Slovak Republic No. 614/2002 Coll., as amended.

#### 6. Current academic year schedule and current timetable

The current schedule of the academic year and the current class schedule are listed in the bulletin "Information about studying at UVMP in Košice" for the given academic year and are also available on the UVMP's website: <u>Study Guide Book at the UVMP for academic year 2022/2023</u>. PhD students study according to an individual study plan drawn up by the supervisor and the PhD student and approved by the person with the main responsibility for the implementation, development and quality assurance of the study programme.

#### 7. Staff

a) The person responsible for the implementation, development and quality of the study programme is Prof. Slavomír Marcinčák, DVM PhD., who is a tenured professor of Food Hygiene for the 3rd level of education; working at the Department of Hygiene, Technology and Health Safety of Food; e-mail slavomir.marcincak@uvlf.sk; mobile +421915 984756.

b) List of persons providing core courses of the study programme:

Prof. Slavomír Marcinčák, DVM PhD., Department of Hygiene, Technology and Health Food Safety,

Prof. Jozef Nagy, DVM PhD., Department of Hygiene, Technology and Health Food Safety,

doc. MVDr. Eva Dudríková, PhD., Department of Hygiene, Technology and Health Food Safetv.

doc. MVDr. Monika Pípová, PhD., Department of Hygiene, Technology and Health Food Safety,

Assoc. Prof. Ivona Kožárová, DVM PhD., Department of Hygiene, Technology and Health Food Safety

- c) Scientific/artistic/pedagogical characteristics of persons providing profile subjects of the study programme are available on the quality portal of UVMP in Košice and direct links are given in Annex 1 of the internal evaluation report.
- d) List of teachers of the study programme with assignment to the course and link to the central register of university staff, with contact details:

Teacher	Course)	e-mail	tel. no.	CRZ				
	Profile courses							
Prof. Slavomír Marcinčák, DVM PhD.	Hygiene and quality of meat and meat products	slavomir.marcincak@uvlf.sk	0915984756	https://www.portalvs.sk/ regzam/detail/6070				
Assoc. Prof Eva Dudríková, DVM PhD.	Hygiene and quality of milk and milk products Hygiene and quality of plant foods	eva.dudrikova@uvlf.sk	0915984582	https://www.portalvs.sk/ regzam/detail/6005				
Prof. Jozef Nagy, DVM PhD.	Hygiene and quality of poultry meat, eggs and game meat	jozef.nagy@uvlf.sk	0915984010	https://www.portalvs.sk/ regzam/detail/6021				
Assoc. Prof. Monika Pipová, DVM PhD.	Food microbiology and foodborne diseases	monika.pipova@uvlf.sk	0915984562	https://www.portalvs.sk/ regzam/detail/6030				
Assoc. Prof. Ivona Kožárová, DVM PhD.	Legislative requirements for health safety and food quality	ivona.kozarova@uvlf.sk	0915984757	https://www.portalvs.sk/ regzam/detail/6056				
	T	Compulsory optional course	S	T				
Prof. Jaroslav Legáth, DVM PhD.	Food toxicology	jaroslav.legath@uvlf.sk	0905442824	https://www.portalvs.sk/r egzam/detail/2269				
Prof. Slavomír Marcinčák, DVM PhD.	Biotechnologic al production and beverage quality	slavomir.marcincak@uvlf.sk	0915984756	https://www.portalvs.sk/r egzam/detail/6070				

Prof. Peter	Hygiene and	peter.popelka@uvlf.sk	0905110774	https://www.portalvs.sk/r
Popelka, DVM	quality of fish			egzam/detail/6062
PhD.	and fishery			
	products			
doc. MVDr. Eva	Hygiene and	eva.dudrikova@uvlf.sk	0915984582	https://www.portalvs.sk/r
Dudríková, PhD.	quality of			egzam/detail/6005
	plant foods			

# e) List of thesis supervisors with assignment to topics (with contact details):

Dissertation Topic	Supervisor	Contact
Aplikácia fermentovaných produktov	prof. MVDr. Slavomír	slavomir.marcincak@uvlf.sk
a humínových látok vo výžive hydiny na zlepšenie	Marcinčák, PhD.	
zdravia zvierat a produkciu bezpečných potravín		
Účinok skrmovania fermentovaných biokrmív,		
obohatených o významné polynenasýtené mastné		
kyseliny a pigmenty, na kvalitu produkovaného		
hydinového mäsa		
Využitie probiotík v akvakultúre lososovitých rýb	prof. MVDr. Peter	peter.popelka@uvlf.sk
Hodnotenie potenciálne rizikových faktorov	Popelka, PhD.	
pri spracovaní kávy z pohľadu jej kvality		
a bezpečnosti		
Vplyv glazúrovania a antioxidantov na bezpečnosť	prof. MVDr. Jozef	jozef.nagy@uvlf.sk
a kvalitu rýb	Nagy, PhD.	
Sledovanie vybraných ukazovateľov bezpečnosti a		
kvality včelieho medu		
Živočíšne tuky a ich vplyv na zdravotný stav		
človeka		
Konfirmácia rezíduísulfónamidov v potravinách	prof. MVDr. Dionýz	dionyz.mate@uvlf.sk
živočíšneho pôvodu kyselinou para-	Máté, PhD.	
aminobenzoovou		
Štúdium vlastností a možnosti eliminácie		
toxikogénnych plesní a mykotoxínov		
Screening rezíduí aminoglykozidových a beta-		
laktámových antibiotík v mlieku	-	
Štúdium vybraných vlastností čistých	prof. MVDr, Ol'ga	
mliekarských kultúr v procese výroby mliečnych	Burdová, PhD.	
výrobkov		
Aplikácia červenej fermentovanej ryže v	doc. MVDr. Pavel	
potravinárskom priemysle a možnosti jej využitia	Mal'a, PhD.	
Objektivizáciaúloh a požiadaviek senzorického		
hodnotenia potravín		
Vplyv technológie výroby na kvalitu tradičných		
syrárskych špecialít	1 1000 0 1	
Vývoj HACCP v Slovenskej Republike a jeho	doc. MVDr. Pavel	
dopad na funkčnosť systémov zabezpečenia	Bystrický, PhD.	
hygiena potravín živočíšneho pôvodu	1 1000 14 11	7
Štúdium vlastností enterohemoragických izolátov	doc. MVDr. Monika	monika.pipova@uvlf.sk
Escherichia coli O157:H7	Pipová, CSc.	
Antibiotická rezistencia izolátov stafylokokov z		
potarvín živočíšneho pôvodu		
Štúdium faktorov patogenity a rezistencie voči		
antibiotikám u potravinových izolátov		
stafylokokov		
Vývoj nového dezinfekčného prostriedku a jeho		
využitie v potravinárstve		
Výskyt antimikrobiálnej rezistencie u izolátov		
stafylokokov z potravín živočíšneho pôvodu		

Konfirmácia rezíduí antikokcidík v potravinách živočíšneho pôvodu Mikrobiologická identifikácia rezíduí antibiotík v potravinách živočíšneho pôvodu Rezíduá antibiotík v potravinovom reťazci Post-screening rezíduí kokcidiostatík v potravinách živočíšneho pôvodu	doc. MVDr. Ivona Kožárová, PhD.	ivona.kozarova@uvlf.sk
Humínové látky ako alternatíva použitia kokcidiostatík vo výžive hydiny		
Kvalita a bezpečnosť nebovinných druhov mliek (kozie mlieko) Antibiotická rezistencia a faktory virulencie baktérií rodu enterococcus izolovaných z mlieka a mliečnych výrobkov Detegovanie a charkteristiky prospešnej mikroflóry v syroch počas technologickej výroby Hygienické a zdravotné aspekty chovu kôz vo vzťahu ku kvalite mlieka Sledovanie vonkajších a vnútorných vplyvov na kvalitatívne a hygienické vlastnosti surového kravského mlieka	doc. MVDr. Eva Dudriková, PhD.	eva.dudrikova@uvlf.sk
Kvalita a bezpečnosť mäsa zveri Analýza fyzikálnych a biochemických charakterostík zrecieho procesu mäsa zveri vo vzťahu ku kvalite mäsa Štúdium faktorov ovplyvňujúcich fyzikálne a biochemické charakteristiky zrecieho procesu mäsa hydiny	MVDr. Beáta Koréneková, PhD.	beata.korenekova@uvlf.sk

- f) Supervisors of PhD students are university teachers in the position of professor and associate professor in the relevant field of study, scientists with scientific qualification degree I and IIa and other distinguished experts from the Slovak Academy of Sciences. The supervisors are approved by Scientific Board of UVMP.

  Scientific and pedagogical characteristics of thesis supervisors are available on the quality portal of UVMP in Košice through the study plan or directly at <a href="https://qa.uvlf.sk/vupch-viewer/?regzam=X">https://qa.uvlf.sk/vupch-viewer/?regzam=X</a> where X is the employee number on the HE Portal (e.g.. <a href="https://qa.uvlf.sk/vupch-viewer/?regzam=6070">https://qa.uvlf.sk/vupch-viewer/?regzam=6070</a> Employee record on the University portal of UVMP in Košice).
- g) Student representatives who represent the interests of PhD students (name and contact details):
   The member of the study programme committee was student of food hygiene Mgr. Miriam Sondorová; e-mail: miriam.sondorova@student.uvlf.sk.
- h) Study programme advisor: vice-rector for research and PhD studies at UVMP in Košice
- i) Other study programme support staff assigned study officer: Júlia Jančura, Mgr. e-mail <u>julia.jancura@uvlf.sk</u>; career counsellor: the position of the career counsellor is performed by the PhD student's supervisor.

### 8. Premises, tools and technical equipment

a) List and characteristics of the study programme classrooms and their technical equipment with assignment to learning outcomes and course matter:

Course	Characteristics of material and technical equipment	Pavilion number and room
		designation
Hygiene and quality of milk and milk products	Laboratory equipment for milk and dairy analysis: Lactoscan SCC, Lactoscan MCCV, Cryostar 1, PCR equipment for microbiological analysis, Analyzer LactiCheck LC-01/A, laboratory balances, pH meters, Conductometer 1C10 VR07400997/0736037 Spekol 11, Centrifuge EBA 20 Hettich, Centrifuge cold,HETTICH MICRO table, RADWAG MA50.R dryer for cheese dry matter determination, Refrigerators (3x), Electrophoresis CHU 20 + electrophoretic source PS 503, Laboratory fume hood 12 HPL, Microwave oven Whirlpool, Water bath Memmert, Colorimeter CR 410 v.no.B8407092 with data processor, sterilizers, autoclaves, microbiological thermostats and microscopes, microbiological thermometers Fully equipped technological laboratory (technological workshop) for milk processing and production of dairy products (shepherd, milk centrifuge, butcher, smoker, vacuum packer, cheese salting tank, cheese lys, etc.)	KHTaZBP, building P-10, door no. 6 and 7
Hygiene and quality of poultry meat, eggs and game meat	Laboratory of chemical analysis of foodstuffs equipped with Egg Quality Analyzer, Eggshell Strength Meter, VELP analyzer for protein content analysis, spectrophotometers for analysis of fat and protein degradation changes, salt content, nitrogenous substances, water activity analyzing device, homogenisers, HPLC equipment for the analysis of contaminants in foodstuffs, refrigerators and freezers for the storage of samples, pH meters, needle thermometers, oximeter, electrophoretic analyser, laboratory equipment for the analysis of food components by titration methods. Fully equipped technological workshop, including meat and meat products production devices.  Gastronomic training room equipped with heat treatment, packaging and storage of meat devices (contact grill, el. stoves, sous vide equipment, refrigerators, freezers, vacuum food packer).  The seminar "Food microbiology and foodborne diseases" also uses the microbiology laboratory	KHTaZBP, building P-6, Laboratory of Chemical Analysis of Foodstuffs, no.; Building P-6 Microbiology and Mycology Laboratory, Nos. 21 and 47 Building P-6 basement; Building P-14 - basement
Food microbiology and foodborne diseases	Material and equipment for bacteriological, mycological and molecular diagnostics: Thermostats, autoclaves, hot air sterilizer, refrigerators, freezers, deep freezers, BSL2 laminar boxes, PCR box, centrifuges, ultracentrifuges, gradient thermocycler for PCR, Real time PCR equipment, electrophoretic apparatus, photo-documentation equipment for visualization and photo-documentation of agarose gels, microvolume spectrophotometer for DNA quantification. Spectrophotometers, pH meters, ultrasonic bath, ELISA reader, optical microscopes, digital microscopes, thin layer chromatography chamber,	Building P-6, Microbiology and Mycology Laboratory at KHTaZBP, Nos 21 and 47
Food toxicology	Standard laboratory equipment, analytical sets, spectrophotometers, thin layer chromatography equipment, stereoscope, microscope, camera, histology equipment including microtome, imaging, staining equipment, analytical and evaluation software.  Material and equipment for animal dissection or for further diagnostic laboratory methods/examinations: sledge microtomes (pfm Slide 2003 - pfm medical Germany and Histoslide 2000, Leica - Reichert - Jung), Shandon Citadel - tissue processor, watering device WD4, light microscopes with camera: MOTIC + photocamera MOTICAM 2330, NICON	Pavilion 36: Department of Pharmacology and Toxicology - rooms 310, 311; Pavilion 4: Department of Pharmacology and Toxicology

	Eclipse Tí + photocamera), thermostat, refrigerator, laminar	
	box, PCR box, centrifuge and cytocentrifuge, thermocycler for PCR, CO2 incubator, deep freezer box.	
Hygiene and quality of meat and meat products	Laboratory of chemical analysis of foodstuffs equipped with VELP analyzer for the analysis of protein content, spectrophotometers for the analysis of degradation changes of fats and proteins, salt content, nitrogenous substances, analyzer for the determination of water activity, homogenizers, HPLC equipment for the analysis of contaminants in foodstuffs, refrigerators and freezers for sample storage, pH meters, needle thermometers, oximeters, electrophoretic analysers, laboratory equipment for the analysis of food constituents by titration methods, dryers, laboratory fume cupboards and necessary accessories.  Fully equipped technological workshop, including meat and meat products production devices.  Gastronomic training room equipped with heat treatment, packaging and storage of meat devices (contact grill, el. stoves, sous vide equipment, refrigerators, freezers, vacuum food packer).  The seminar "Food microbiology and foodborne diseases" also	KHTaZBP, Building P-6 Chemical Food Analysis Laboratory, Building P-6 Basement Gastronomy Training Room and Building P-14 - Basement Meat Processing Shop, Building P-6, Microbiology and Mycology Laboratory at KHTaZBP, Nos 21 and 47
Legislative	uses the microbiology laboratory.  Lecture room ground floor of the building, multimedia	KHTaZBP building
requirements for health safety and food quality	projector, desktop computer, laptop, access to necessary databases and food safety systems	P-6 - lecture room ground floor
Biotechnological	Biotechnological workshop for the production of	KHTaZBP building
production and beverage quality	biotechnological beverages (beer, mead and wine): grinding and milling machine, fruit press, stainless steel containers, beverage filter, vacuum beverage filter, auxiliary tools and aids for the implementation of the production process of the abovementioned beverages.  Fully equipped laboratory for chemical analysis of wine, beer and spirits: electric ebulioscope, acid analyzer, biochemical analyzer of wine components (sugar, free and total sulfur dioxide, content of individual acids, electrophoretic analyzer EA102+column, software for the analysis of individual acids in beverages, spectrophotometric analyzers for the analysis of antioxidant components in beverages, part of the room is also a sensory room for sensory analysis of beverages (wine, beer). The seminar "Food microbiology and foodborne diseases" also uses the microbiology laboratory.	P-6 room, ;building P-14 - basement; building P-10 - basement; building P-6 Microbiological and mycological laboratory, Nos. 21 and 47
Hygiene and quality of fish and fishery products	Laboratory of chemical analysis of foodstuffs equipped with VELP analyzer for the analysis of protein content, spectrophotometers for the analysis of degradation changes of fats and proteins, salt content, nitrogenous substances, analyzer for the determination of water activity, homogenizers, HPLC equipment for the analysis of contaminants in foodstuffs, refrigerators and freezers for sample storage, pH meters, needle thermometers, oximeters, electrophoretic analysers, laboratory equipment for the analysis of food constituents by titration methods, dryers, laboratory fume cupboards and necessary accessories.  Fully equipped technological workshop, including meat and meat products production devices.  Gastronomic training room equipped with heat treatment, packaging and storage of meat devices (contact grill, el. stoves, sous vide equipment, refrigerators, freezers, vacuum food packer).  The seminar "Food microbiology and foodborne diseases" also uses the microbiology laboratory.	KHTaZBP Building P-6 Chemical Food Analysis Laboratory, Building P-6 Basement Gastronomy Training Room and Building P-14 - Basement Meat Processing Shop, Building P-6, Microbiology and Mycology Laboratory at KHTaZBP, Nos 21 and 47

- b) Availability of study materials (access to literature in line with syllabi sheets, access to information databases and other information sources, information technologies, etc.): All literary resources for study outlined in the syllabi are available either in print or electronic form, all information databases purchased and licensed by the university are widely available to students.
- c) Description and scope of distance education in the study programme with per course. Access data, manuals of e-learning portals. Procedures for the transition from in-person to distance learning.
  - UVMP in Košice also provides distance learning for all courses via the MOODLE and MS Teams platforms. Each student can access manuals either in electronic form or in the form of video instructions.
- d) Partners of the university in the provision of educational activities of the study programme and characteristics of their participation: For the purpose of practice, the following institutions and organisations are willing to provide a helping hand: the State Veterinary and Food Administration of the Slovak Republic, the Slovak Academy of Sciences and private companies in the food industry.
- e) Characteristics of social, sporting, cultural, spiritual and community facilities: UVMP in Košice provides its students with a wide range of opportunities for all-round enjoyment in all of the above areas (a detailed description is included in the internal evaluation report).
- f) Mobility and internships opportunities (with contact details), application instructions, rules for recognizing this education:
   Students of the study programme are guaranteed the opportunity to participate in
  - mobilities. The entire agenda containing instructions and conditions for applying for mobility, conditions and rules of participation as well as rules for recognizing mobility as part of the study plan is covered by the Vice-Rector for International Relations and Internationalisation and the organisational unit managed by her, which is the UVMP Mobility Office. The whole process requires coordination with the supervisor, and is recommended after the study part of the study plan has been completed. Participation in mobility and other contexts are regulated in Article 42 of the Study Guidelines of the UVMP, Part B.

#### 9. Required skills of the applicant and prerequisites

- a) Required competences and prerequisites for admission to study:
  They are laid down in Article 1 and Article 2, Part B, Part II Organisation of Studies of the Internal Regulations of the Study Guidelines of the UVMP.
- b) Admission procedures:
  - These are laid down in Article 3 and Article 4, Part B, Part II Organisation of Studies of the Internal Regulations of the <u>Study Guidelines of the UVMP</u>. Examination boards for admission examinations are at least 4-member and are appointed by the Rector on an ad hoc basis according to the the study programmes to which students apply.

c) The results of the admission procedure are published on the UVMP in Košice website. The results of the admission procedure for the last 6 years: 8 applicants applied, 6 admitted

# 10. Feedback on the quality of education provided

a) Procedures for monitoring and evaluating students' views on the quality of the study programme:

The students of UVMP in Košice can evaluate the quality of teaching anonymously through an anonymous questionnaire after graduation, where they evaluate the quality of a particular study programme and the quality of the lecturers who provide the course. Monitoring of study programmes is also continuously carried out by the coordinators of individual fields (5) of science and research at UVMP.

b) Results of student feedback and related measures to improve the quality of the study programme:

The feedback and measures to improve the quality of the study programme are part of the Annual Reports on the Educational Activity at UVMP in Košice for individual academic years and the <u>Annual report on activities UVMP 2021</u> for individual academic years. As part of the measures to improve the quality of the study programme, the vice-rector for education, study advisors and coordinators of individual fields of science and research step in and address the issues resulting from the feedback.

c) Results of alumni feedback and related measures for improving the quality of the study programme:

The results of alumni feedback and related measures to improve the quality of the study programme are included in the Annual Reports on the Activities of UVMP in Košice and Annual Reports on the Quality of UVMP in Košice for individual academic years. As part of the study programme quality improvement, the results of graduate evaluations are discussed once a year at the relevant committee for the establishment, modification and periodic evaluation of study programmes, where individual comments and proposals for improving the quality of the study programme are discussed. From the academic year 2022/2023, the UVMP will evaluate the readiness of graduates in the form of an electronic questionnaire for employers, which is available at <a href="https://forms.gle/z1h9u3rd2g9H589P7">https://forms.gle/z1h9u3rd2g9H589P7</a>.

11. Overview of long-term and continuous success in obtaining financial support

11. U	verview of long-term and c	conunuot	us succes	s in obtaining financial support		
P.no.	Project number	From	То	Project name	Provider	Principal Investigator / Co-Principal Investigator
1	1/0939/12	2012	2014	New alternatives for screening antimicrobial residues in food-producing animal tissues	SGA	Assoc. Prof. Ivona Kožárová, DVM PhD.
2	001UVLF-4/2013	2013	2015	Preparation of the university textbook "Hygiene and Technology of Meat and Meat Products"	CEGA	prof. MVDr. Peter Turek, PhD.
3	APVV-14-0397	2015	2019	Application of bio-feeds in poultry nutrition for the production of functional foods enriched with essential polyunsaturated fatty acids	RDPA	Prof. Slavomír Marcinčák, DVM PhD.
4	011UVLF-4/2015	2015	2017	Food safety-study material and didactic aids for the joint study programme	CEGA	Prof. Jozef Nagy, DVM PhD.
5	005UVLF-4/2015	2015	2017	Multimedia support for teaching of hygiene and milk technology as an innovative study in the School of General Veterinary Medicine	CEGA	doc. MVDr. Eva Dudríková, PhD.
6	1/0705/16	2016	2018	Impact of microscopic filamentous fungi and their secondary metabolites on egg quality and safety	SGA	MVDr. Pavlína Jevinová, PhD.
7	1/0576/17	2017	2019	Study of the use of new alternative methods for antibiotic residue screening in the control system of coccidiostats and their residues in food and feed	SGA	Assoc. Prof. Ivona Kožárová, DVM PhD.
8	1/0161/17	2017	2019	Utilization of feed supplemented with probiotics in fish nutrition for the production of healthy food	SGA	Prof. Peter Popelka, DVM PhD.
9	PPI/APM/2018/1/00010/U/001	2018	2022	Cultural heritage of small regions		Prof. Slavomír Marcinčák, DVM PhD.

10	APVV-18-0039	2019	2023	Application of fermented bioproducts and humic substances in poultry nutrition, a new approach to improve animal health and produce safe and functional food	RDPA	Prof. Slavomír Marcinčák, DVM PhD.
11	313011V336	2019	2023	Demand-driven research for sustainable and innovative food, Drive4SIFood	EU SF	Prof. Slavomír Marcinčák, DVM PhD.
12	007UVLF-4/2020	2020	2022	Innovation in teaching of hygiene and technology of dairy products at the University of Veterinary Medicine and Pharmacy in Košice	CEGA	MVDr. Jana Maľová, PhD.
13	020-1-SK01-KA203-078333	2021	2023	ERASMUS+ 2020-1- SK01-KA203- 078333_FOODINOVO	Erasmus+	Prof. Slavomír Marcinčák, DVM PhD.
14	015UVLF-4/2021	2021	2023	The use of digital online communication tools in the implementation of distance learning in the study subject Official Food Inspection	CEGA	Assoc. Prof. Ivona Kožárová, DVM PhD.
15	1/0156/21	2021	2024	Application of multiple factor analysis to the qualitative and quantitative parameters of the wine produced to achieve a reduction of biogenic amines	SGA	MVDr. Boris Semjon, PhD.
16	1/0073/22	2022	2024	Evaluation of the impact of innovative coffee processing methods on coffee health safety and quality	SGA	Prof. Peter Popelka, DVM PhD.

# 12. Links to other relevant internal regulations and information regarding the study or the student of the study programme:

Study Guide Book at the UVMP for academic year 2022-2023

Directive on support of students and applicants to study with specific needs at the UVMP Study guidelines of UVMP in Košice

Annual report on activities UVMP 2021