



University of Ljubljana, Veterinary Faculty has prepared its Single cycle Master degree study programme Veterinary Medicine in accordance with Directive 2005/36/EC, Bologna rules and the national law of higher education. Teaching standards have been regularly tested by the European Association of Establishments for Veterinary Education (EAEVE) since 1999.

The study programme lasts **6 years (12 semesters)** and contains **360 ECTS**. The academic year is divided into winter (fall) and summer (spring) semesters.

The winter semester starts on the first working day of October and ends mid-January (including Christmas and New Year's vacation week, from 24th December to 2nd January).

The summer semester starts mid-February and ends mid-June (including the May 1st - 1 week vacation at the end of April, beginning of May). Each semester lasts 15 weeks and has 30 ECTS, which accounts 60 ECTS on the yearly basis of a study year.

The program is **taught in Slovene**. There are no special courses organized for incoming students. One contact hour lasts 45 minutes. Each course gives at least 3 ECTS with no decimal points allowed. Ten percent of topics are elective courses. During the 6th year, students have to do three months of practice, with one month as extramural practice.

Incoming students will only be allowed to take their exams if they complete the entire programme of a specific course in Ljubljana. Exams will be provided only during the regular examination periods (winter, spring and fall) that are valid for home students. It is possible to take exams in English.

University
of Ljubljana *Veterinary*
faculty



Single-cycle Master Degree Study Programme Veterinary Medicine

Academic Year 2023/2024

General Information

Programme	Veterinary Medicine
Type	Single cycle Master degree programme
Level	Second cycle
KLASIUS-SRV	Master education (second cycle)/Master education (second cycle) (17003)
ISCED	Veterinary Medicine (64)
KLASIUS-P	Veterinary Medicine (details not specified) (6400)
KLASIUS-P-16	Veterinary Medicine (0841)
Frascati	Medical Sciences (3) Biotechnical Sciences (4)
Level SOK	Level SOK 8
Level EOK	Level EOK 7
Level EOVK	Second cycle
Areas / modules / discipline	Veterinary Medicine (study programme)
Member of University of Ljubljana	Veterinary Faculty, Gerbičeva ulica 60, 1000 Ljubljana, Slovenia
Duration (years)	6
Number of Credit Points per Year	60
Method of study	regular

Main Objectives of the Programme

In accordance with EU directives, a Doctor of Veterinary Medicine must be able to carry out all veterinary activities upon completion of his studies. This means that during his studies he/she must be familiar with all the theoretical foundations and practical procedures that provide him/her with this knowledge. Therefore, a Doctor of Veterinary Medicine must be prepared for all types of work, from the treatment of small and large animals to the sanitary inspection of meat and food products in food processing establishments. The basic objective of the programme is to acquire the medical-veterinary skills necessary to independently solve professional problems in the fields of:

- *prevention of occurrence, spread and eradication of animal infectious diseases,*
- *prevention of transmission of infectious diseases dangerous to animals and humans,*
- *veterinary public health,*
- *production and processing of safe food, especially of animal origin,*
- *treatment, protection and welfare of economic and companion animal species,*
- *protection of the environment from a veterinary point of view.*

General Competences

- *ability to analyse, connect and solve problems (problem solving),*
- *autonomy in decision-making in professional work,*
- *awareness of ethical, moral and material responsibility,*
- *ability to organize and plan,*
- *knowledge of research methods and their applicability at work,*
- *ability to work in groups,*
- *communication and cooperation with users and other professions,*
- *ability to communicate both verbally and orally in native and foreign languages,*
- *information management (information technology, obtaining information from various sources, e.g. textbooks, articles, the Internet, etc.).*

Course-specific Competencies

Training of veterinarians in accordance with Directive 2005/36/EU on the recognition of professional qualifications and its amendment 2013/55/EU ensures that the professional acquires the following competences:

- *adequate knowledge of the sciences underlying the activities of the veterinarian and EU law applicable to those activities,*
- *adequate knowledge of the structure, functions, behavior and physiological needs of animals in connection with animal breeding, feeding, welfare, reproduction and general hygiene,*
- *clinical, epidemiological and analytical competences for the prevention, diagnosis and treatment of animal diseases, including anesthesia, aseptic surgery and humane euthanasia, both individually and in groups of animals, including specific knowledge of diseases that could be transmitted to humans,*
- *relevant competencies in preventive medicine, including competences relating to inquiry and certification,*
- *adequate knowledge of the hygiene and technology of the acquiring, producing and marketing of food for animals or food of animal origin intended for human consumption, including the competences necessary to understand and explain good practice in this field,*
- *competences necessary for the responsible and prudent management of veterinary medicinal products used to treat animals and to ensure the safety of the food chain and the protection of the environment.*

The Curriculum of the Study Programme With Holders of the Courses

Legend:

L – lectures;

P – Practical Work;

LAB - Laboratory Practice (bigger groups, usually in 4 groups),

LAB* - Laboratory Practice (smaller groups, usually in 5 groups)

SP – Seminar Practical Work,

PSC - Practical Work in Special Circumstances (usually in 7 groups),

IP – Individual Practice (usually 3 students in a group; at Clinical Practice 1 and 2 there are usually 2 students),

FL – Foreign Language (up to 30 students in a group);

CP - Clinical Practice (usually in 8 groups),

S – Seminars (generally one group),

PT – Practical Training, **TPT** – Terrain Practical Training (generally one group),

The number of groups or the number of students in a group depends on the type of exercises, which are defined Rules on the work and pedagogical obligations of Higher Education Teachers and Associates of the UL Veterinary Faculty.

CH – Contact Hours;

SOW – Student's own work (in hours)

Σ – Sum of Contact Hours and Student's own work

ECTS – Credit Points under the European Credit Transfer System – sum of Contact Hours and Student's own work (1 CP under this study programme indicates 30 hours).

1st Year (RSMDP*)

* With the academic year 2019/2020, we introduced a renewed Single-cycle Master degree programme

Fall Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Cell Biology	Milka Vrecl Fazarinc	33	15 LAB				72	120	4
Anatomy of Domestic Animals	Gregor Fazarinc	60	15 LAB 75 PSC				150	300	10
Biochemistry 1	Petra Zrimšek	65	34 LAB				51	150	5
Animal Hygiene, Physiology of Nutrition and Environmental Management	Štefan Pintarič, Breda Jakovac Strajn	65	32 LAB 4 LAB*		5	10 TPT	94	210	7
Elective course 1									3

Spring Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Anatomy of Domestic Animals	Gregor Fazarinc	45	30 LAB 60 PSC				75	210	7
Biochemistry 1	Petra Zrimšek	40	15 LAB				35	90	3
Genetics	Jelka Zabavnik Piano	45	10 LAB		5		60	120	4
Fodder, Poisonous and Medicinal Plants	Klemen Eler	15	15 LAB			10 TPT	50	90	3
Histology with Embryology 1	Milka Vrecl Fazarinc	30	30 LAB				90	150	5
Animal Production	Peter Dovč	49	6 SP 30 LAB			10 TPT	85	180	6
Elective course 2									3

Elective Courses of 1st Year (RSMDP*)

* With the academic year 2019/2020, we introduced a renewed Single-cycle Master degree programme

Fall Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
English	Andreja Drašler		45 FL				45	90	3
COD - external elective course									3
Veterinary Informatics	Miha Mraz	30	15 LAB				45	90	3
Biophysical Principles of Clinical Diagnostic Methods	Jure Derganc	15	15 LAB		15		45	90	3
Alternative sustainable protein sources in food and feed ¹	Breda Jakovac Strajn	10			20		60	90	3

¹ The course is available in 1st, 2nd, 3rd and 4th year**Spring Semester**

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
COD - external elective course									3
Veterinary Medical Terminology	Jelena Isak Kres	30					60	90	3
History of Veterinary Medicine	Andrej Pengov	30					60	90	3
Communication Skills in Veterinary Medicine 1	Metka Kuhar	15	30 SP				45	90	3
The Methodology of Scientific Research	Jelka Zabavnik Piano	15			15		60	90	3

2nd Year (RSMDP*)

* With the academic year 2019/2020, we introduced a renewed Single-cycle Master degree programme

Fall Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Histology and embryology 2	Milka Vrecl Fazarinc	45	45 LAB				120	210	7
Biochemistry 2	Petra Zrimšek	30	15 LAB		6		99	150	5
Veterinary Physiology	Nina Čebulj Kadunc Robert Frangež	55	45 LAB		5		75	180	6
Microbiology and Immunology	Andrej Pengov	60	30 LAB ¹				120	210	7
Animal Welfare, Ethics and Legislation 1	Ožbalt Podpečan	15			15	5 TPT	55	90	3
Elective course 3									3

Spring Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Veterinary Physiology	Nina Čebulj Kadunc Robert Frangež	55	45 LAB		5		75	180	6
Microbiology and Immunology	Andrej Pengov	60	45 LAB ¹				75	180	6
Feed safety	Breda Jakovac Strajn	40	34 LAB*				76	150	5
Parasitology	Petra Bandelj	60	15 LAB 15 LAB*				150	240	8
Pathology 1	Tanja Švara	75	30 PSC				15	120	4
Elective course 3									

Elective Courses of 2nd Year (RSMDP*)

* With the academic year 2019/2020, we introduced a renewed Single-cycle Master degree programme

Fall Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
English	Andreja Drašler		45 TJ				45	90	3
COD - external elective course									3
Veterinary Informatics	Miha Mraz	30	15 LAB				45	90	3
Biophysical Principles of Clinical Diagnostic Methods	Jure Derganc	15	15 LAB		15		45	90	3
Alternative sustainable protein sources in food and feed ¹	Breda Jakovac Strajn	10			20		60	90	3

¹ The course is available in 1st, 2nd, 3rd and 4th year

Spring Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
COD - external elective course									3
Veterinary Medical Terminology	Jelena Isak Kres	30					60	90	3
History of Veterinary Medicine	Andrej Pengov	30					60	90	3
Communication Skills in Veterinary Medicine 1	Metka Kuhar	15	30 SP				45	90	3
The Methodology of Scientific Research	Jelka Zabavnik Piano	15			15		60	90	3

3rd Year (RSMDP*)

* With the academic year 2019/2020, we introduced a renewed Single-cycle Master degree programme

Fall Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Pathophysiology	Robert Frangež	100	36 LAB		2		192	330	11
Pathology 2	Tanja Švara	45	24 LAB 36 PSC				165	270	9
Biostatistics	Tanja Knific	20	10 SP				60	90	3
Basic Clinical Science	Modest Vengušt	60					30	90	3
Pharmacology with Toxicology	Tomaz Snoj	45	30 LAB				75	150	5
Elective course 4									3

Spring Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Food safety 1	Andrej Kirbiš	40					50	90	3
Pharmacology with Toxicology	Tomaz Snoj	24	30 LAB		6	5 TPT	55	120	4
Surgery and Ophthalmology	Vladimira Erjavec	60	12 IP 28 LAB* 20 PSC				90	210	7
Diagnostic Imaging	Aleksandra Domanjko Petrič	15	5 LAB	15	10		75	120	4
Basic Clinical Science	Modest Vengušt			30			90	120	4
Animal and Environmental Hygiene	Štefan Pintarič	30	25 LAB		10	10 TPT	45	120	4
Elective course 4									

Elective Courses of 3rd Year (RSMDP*)

* With the academic year 2019/2020, we introduced a renewed Single-cycle Master degree programme

The student may enroll in any elective course from the 1st or 2nd Year which he/she has not yet enrolled in or can choose from the table below.

Fall Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Anatomy of Laboratory and Exotic Animals ¹	Valentina Kubale Dvojmoč	30	5 PSC	5		5 TPT	45	90	3
Behavioral Neurobiology ²	Gregor Majdič	15	5 LAB	10	30		30	90	3

¹ The course is available in 3rd, 4th and 5th year

² The course is available in 3rd in 4th year

Spring Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Microbiology Practical Course	Andrej Pengov		15 LAB*	30			45	90	3
Experimental Pathophysiology and Toxinology ¹	Robert Frangež	10	20 IP		5		55	90	3

¹ The course is available in 3rd, 4th 5th and 6th year

4th Year (RSMDP*)

* With the academic year 2019/2020, we introduced a renewed Single-cycle Master degree programme

Fall Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Reproduction of Domestic Animals with Obstetrics	Marjan Kosec	55	17 LAB*	23		5 TPT	80	180	6
Diseases and Health Care of Equines	Peter Kruljc	40		30		5 TPT	75	150	5
Veterinary Economics	Emil Erjavec Jaka Žgajnar	20			10		60	90	3
Diseases and Health Care of Ruminants	Jože Starič	45		30		5 TPT	70	150	5
Veterinary sanitary control of animals for slaughter and meat	Andrej Kirbiš	45	30 PSC				45	120	4
Diseases and Health Care of Fish and Bees	Metka Pislak Ocepek	15	5 LAB 9 PSC		1	5 TPT	25	60	2
Animal welfare, ethics and legislation 2	Alenka Dovč	15			15	5 TPT	55	90	3
Elective course 5									3

Spring Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Reproduction of Domestic Animals with Obstetrics	Marjan Kosec	55	18 LAB*	22		5 TPT	80	180	6
Diseases and Health Care of Equines	Peter Kruljc	30		26	4	5 TPT	85	150	5
Veterinary sanitary control of animals for slaughter and meat	Andrej Kirbiš		45 PSC				45	90	3
Diseases and Health Care of Ruminants	Jože Starič	40	20 LAB*	30		5 TPT	55	150	5
Animal Clinical Nutrition	Breda Jakovac Strajn	40	30 LAB				50	120	4
Diseases and Health Care of Fish and Bees	Metka Pislak Ocepek	20	5 LAB 9 PSC		1	5 TPT	50	90	3
Epizootiology	Ivan Toplak	30	5 LAB				55	90	3
Elective course 5									

Elective Courses of 4th Year (RSMDP*)

* With the academic year 2019/2020, we introduced a renewed Single-cycle Master degree programme

The student can enroll in any elective course from the 1st, 2nd or 3rd Year, which he/she has not enrolled in the past or can choose from the table below.

Fall Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Ecotoxicology in Veterinary Medicine	Tomaž Snoj	15	10 LA		15	5 TPT	45	90	3
Surgery Practical Course	Vladimira Erjavec		12 IV 33 LAB*				45	90	3
Use of Experimental/Laboratory Animals in Research	Jelka Zabavnik Piano	30	7 LAB*		3		80	120	4

Spring Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Pathomorphological Practice	Tanja Švara	2	5 LAB* 18 PSC		5		60	90	3
Parasitological Practical Course	Petra Bandelj	5		25			60	90	3
Health Care of Small Ruminants	Jože Starič, Jožica Ježek	8		12	10		60	90	3

5th Year**Fall Semester**

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Veterinary Sanitary Control of Animals for Slaughter and Meat	Andrej Kirbiš	45	30 PSC				75	150	5
Diseases and Health Care of Ruminants	Jože Starič	45		30		5 TPT	100	180	6
Small Animal Internal Medicine and Surgery	Nataša Tozon	35		40			105	180	6
Diseases and Health Care of Fish and Bees	Metka Pislak Ocepek	15	7 PSC 6 LAB		2	5 TPT	55	90	3
Hygiene & Control of Milk, Milk Products and Food of Vegetable Origin	Andrej Kirbiš	35	20 LAB 20 LAB*			5 TPT	70	150	5
Hygiene of Food Production Plants	Štefan Pintarič	30				10 TPT	50	90	3
Diseases and Health Care of Small Animals	Jožko Račnik	25		15	5		75	120	4
Elective course 6									3

Spring Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Veterinary Sanitary Control of Animals for Slaughter and Meat	Andrej Kirbiš		45 PSC				15	60	2
Diseases and Health Care of Ruminants	Jože Starič	40	30 LAB*	30		5 TPT	45	150	5
Small Animal Internal Medicine and Surgery	Nataša Tozon	35		40			105	180	6
Diseases and Health Care of Fish and Bees	Metka Pislak Ocepek	15	6 PSC 7 LAB		2	5 TPT	55	90	3
Hygiene Control of Meat, Fish and Products	Andrej Kirbiš	35	23 LAB 22 LAB*			10 TPT	60	150	5
Diseases, Breeding and Health Care of Wildlife Species	Gorazd Vengušt	30	5 LAB 8 LAB* 2 PSC			10 TPT	65	120	4
Elective course 6									

Elective Courses of 5th Year (RSMDP*)

* With the academic year 2019/2020, we introduced a renewed Single-cycle Master degree programme

The student can enroll in any elective course from the 3rd or 4th Year, which he/she has not enrolled in the past except Alternative sustainable protein sources in food and feed or can choose from the table below.

Fall Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Practice of Reproduction	Janko Mrkun			45			45	90	3
Equine Lameness Evaluation Wet-lab	Modest Vengušt	6		30			54	90	3
Cytopathological practice	Tanja Švara, Nataša Tozon	13	15 LAB 4 PSC 4 IP				54	90	3
Zoonoses	Peter Hostnik	45	15 LAB*		15		45	120	4
Cynology for Veterinarians	Aleksandra Domanjko Petrič	15				15 TPT	60	90	3

Spring Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Ethology in Animal Health Care	Štefan Pintarič		30 SP				60	90	3
Rearing Conditions and Health Care of Rabbits	Olga Zorman Rojs	20	2 SP	8			60	90	3
Rearing Conditions and Health Care of Reptiles and other Exotic Animals	Alenka Dovč	30	5 SP	10			45	90	3
Biosafety	Tadej Malovrh	10	1 LAB	24	10		45	90	3
Advanced surgery in cattle	Ožbalt Podpečan	10		15	20		45	90	3

6th Year

Fall Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Administrative and Forensic Veterinary Medicine	Mitja Gombač	90	15 SP				165	270	9
Clinical practice 1	Modest Vengušt		90 IP				0	90	3
Professional practice	Modest Vengušt					270 IP	0	270	9
Elective course (the student chooses 3 courses in each semester, all together 6)									9

Spring Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Administrative and Forensic Veterinary Medicine	Mitja Gombač				30		60	90	3
Clinical practice 1	Modest Vengušt		90 IP				0	90	3
Professional practice	Modest Vengušt					450 IP	0	450	15
Elective course (the student chooses 3 courses in each semester, all together 6)									9

Elective Courses of 6th Year (RSMDP*)

* With the academic year 2019/2020, we introduced a renewed Single-cycle Master degree programme

The student can enroll in any elective course from the 4th or 5th Year, which he/she has not enrolled in the past (except Alternative sustainable protein sources in food and feed) or can choose from the table below. The student must enroll elective courses in total sum of 18 ECTS – 9 ECTS in Winter and 9 ECTS in Summer semester. The course Experimental Pathophysiology and Toxinology is also available in this Year (for more information on the course please check under elective courses of 3rd Year)

Fall Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Clinical Laboratory Practical Course	Jožica Ježek	10	20 LAB*				60	90	3
Anaesthesiology	Alenka Seliškar	15	30 IP				45	90	3
Veterinary Dentistry	Ana Nemec	12	8 LAB	16	4		50	90	3
Dermatology of dogs and cats	Tina Kotnik	8		22			60	90	3
Dietetics of Dogs and Cats	Breda Jakovac Strajn	10	10 LAB 5 SP			5 TPT	60	90	3
Breeding and Health care of Wild Animals in Enclosures	Gorazd Vengušt	20		15		10 TPT	45	90	3
Veterinary Proficiency	Mitja Gombač				30		60	90	3
Practicum on Health Care of Pigs	Marina Štukelj	5		40			45	90	3
Emergency Medicine of Dogs and Cats	Darja Pavlin	15		25			50	90	3
Microbial and Antimicrobial Environment in Vet. Med.	Modest Vengušt, Irena Zdovc	30	10 LAB		15		35	90	3

Spring Semester

Course	Holder of the Course	Contact Hours					SOW	Σ	ECTS
		L	P	CP	S	PT			
Clinical Oncology in Veterinary Medicine	Nataša Tozon	16		23 IP	6		45	90	3
Herd Health Management Course	Andrej Pengov				30		60	90	3
Cardiology of Dogs and Cats	Aleksandra Domanjko Petrič	10		20			60	90	3
Equine Sports Medicine	Modest Vengušt	10		20			60	90	3
Honeybee Society and its Diseases	Metka Pislak Ocepek	10	15 LAB	20	2	3 TPT	40	90	3
Communication Skills in Veterinary Medicine 2	Metka Kuhar	15	30 SP				45	90	3
Business and Entrepreneurship in Veterinary Medicine	Jaka Žgajnar, Emil Erjavec	15			15		60	90	3
Food Fraud	Urška Jamnikar Ciglenečki	5			25		60	90	3