

STUDY PROGRAMME – V E T E R I N A R Y M E D I C I N E

Field of studies:	Veterinary Medicine
Level of study:	Long-cycle Master's degree programme
Profile of study:	general academic
Form of study:	intramural, extramural
Duration of degree programme:	11 semesters (5.5 YEAR)
The total number of ECTS required for graduation:	360
Professional title:	lekarz weterynarii (eq. of: veterinary surgeon doctor of veterinary medicine)
ISCED code for study programme	0841

Study programme is assigned to following discipline/disciplines:

LP	Discipline	Leading discipline (YES/NO)	Percentage of learning outcomes related to discipline
1.	WETERYNARIA (VETERINARY MEDICINE)	YES	100%
Total:			100%

LEARNING OUTCOMES

Based on the Regulation of the Ministry of Science and Higher Education from July 17th 2019, regarding education standards for veterinary profession.

GENERAL LEARNING EFFECTS

Regarding basic knowledge graduate knows and understands:

- 1) rules and mechanisms governing animal health, disease and therapy, from the cellular level, through the organs, organisms, herds to the whole population of animals;
- 2) development, structure, functioning behaviour and physiological mechanisms of animals in physiological conditions and mechanisms of disorders in pathology;
- 3) aetiology, pathogenesis and clinical symptoms of disease in various animal species and measures of therapeutic action;
- 4) diagnostic (including differential diagnostics) and therapeutic procedures specific for animal diseases;
- 5) guidelines for prescription of veterinary medical products for prophylaxis and therapy of animals and towards the food chain safety and environmental protection;
- 6) biology of infectious agents inducing diseases transmitted between animals, animals and humans, including mechanisms of the disease transmission and macro-organism defence systems;
- 7) guidelines of clinical evaluation according to the clinical evaluation plan, analysis of clinical symptoms and patomorphological changes;
- 8) guidelines for animal husbandry and breeding, including guidelines for animal feeding, animal well-being and production economics;
- 9) guidelines for use and utilisation of animal by-products and waste;
- 10) guidelines for ante-mortem and post-mortem examination of animals and products of animal origin;
- 11) guidelines for protection of consumer health;
- 12) guidelines for monitoring of production of food of animal origin;
- 13) norms, guidelines and conditions of animal production technology and of the hygiene of the technological process;
- 14) appropriate law regulations concerning veterinary practice;

15) basic information technologies and biostatistic methods utilised in veterinary practice.

Regarding professional skills graduate knows how to:

- 1) conduct clinical evaluation, according to the principals of medical practice;
- 2) analyse and interpret clinical symptoms, patomorphological changes, results of laboratory tests and other diagnostic methods, formulate diagnosis based on the principles of differential diagnostics, and conduct therapeutic or preventive actions;
- 3) formulate diagnostic plan;
- 4) monitor herd health and implement official epizootic procedures in case of the law-regulated diseases;
- 5) perform ante-mortem and post-mortem examination and examination of meat and other products of animal origin;
- 6) perform actions concerning veterinary supervision, including animal trade, conditions of animal facilities and manufacture of products of animal origin;
- 7) issue official opinion and veterinary verdict;
- 8) use Latin medical nomenclature to accurately understand and describe medical procedures, animal health conditions, diseases and pathological changes;
- 9) use basic computer systems for management of veterinary clinic and animal herd, and for the analysis of epizootic situation;
- 10) conduct basic statistical analyses and utilise appropriate methods to propagate their results;
- 11) utilise nomenclature and grammatic structure of foreign language, considered a language of international communication, to formulate and understand written and spoken expression of both general and veterinary nature;
- 12) maintain physical prowess required for work with selected animal species.

Regarding social competences, graduate is prepared to:

- 1) take responsibility for his decisions concerning humans, animals and environment;
- 2) act within the current standards and ethical obligations, perform actions based on the code of professional ethics, show tolerance to beliefs and behaviour influenced by different sociological and cultural background;
- 3) show competence in solving of conflicts and pliability in the reactions for sociological changes;
- 4) utilise unbiased sources of information;
- 5) formulate conclusions from personal measurements or observations;

- 6) formulate opinions regarding various aspects of professional conduct;
- 7) perform critical self-evaluation, formulate constructive criticism regarding veterinary practice, accept criticism regarding postulated solutions, factual respond to that criticism based on the current scientific knowledge;
- 8) constantly update knowledge and skills for professional development;
- 9) communicate with co-workers and share the knowledge;
- 10) operate under stress and duress;
- 11) collaborate with specialists of other professions for the protection of public health;
- 12) engage in the operations of professional and territorial organisations.

DETAILED EFFECTS OF LEARNING

A. BASIC ACADEMIC EDUCATION

Regarding basic knowledge graduate knows and understands:

- A.W.1. morphology of the animal organism: cells, tissues, organs and systems;
- A.W.2. structure, functions, regulatory mechanisms and integration of the systems of the animal organism (respiratory, gastrointestinal, cardiovascular, urinary, nervous, reproductive, endocrine, immune and skin);
- A.W.3. development of organs and the whole organism in relation to the adult organism;
- A.W.4. metabolic processes on the molecular, cellular, organ and organism level;
- A.W.5. mechanisms of homeostasis, water management and acid-base balance;
- A.W.6. basic chemical reactions in water solutions;
- A.W.7. laws of hydrodynamics and factors influencing vascular blood flow;
- A.W.8. physical-chemistry regarding sensory functions;
- A.W.9. mechanisms of neurohormonal regulation, reproduction, ageing and death;
- A.W.10. mechanisms underlining animal health, disease and their therapy – from the cellular level, through organs, organism, herd to the whole population of animals;
- A.W.11. relationship between factors influencing homeostasis of biological processes and physiological, and pathological changes;
- A.W.12. patophysiological changes in the organs and systems, biological mechanisms (including immunological) and therapeutical actions facilitating recovery;
- A.W.13. biology of infectious agents inducing diseases transmitted between animals, animals and humans, including mechanisms of the disease transmission and organism defence systems;
- A.W.14. genetic mechanisms, genetic disorders and bases of the genetic engineering;
- A.W.15. basics of microbiological diagnostics;

- A.W.16. mechanisms of drug action, their fate in the organism, adverse actions and drug-to-drug interactions of veterinary pharmaceuticals in target animal species;
- A.W.17. the uses of anti-microbial and anti-parasitic chemotherapy;
- A.W.18. mechanisms of antibiotic resistance, including multi-antibiotic resistance by microorganisms and cancer cells;
- A.W.19. procedures and elements required to issue prescription for veterinary pharmaceuticals;
- A.W.20. English and Latin medical nomenclature;
- A.W.21. types of animal poisonings, diagnostic and therapeutic strategies in poisoning cases;
- A.W.22. code of ethics of veterinary surgeon;
- A.W.23. laws governing intellectual property;

Regarding basic skills graduate knows how to:

- A.U.1. utilise knowledge of physics to explain the influence of external factors (temperature, pressure, electromagnetic force, ionizing radiation) on animal organism;
- A.U.2. utilise basic laboratory techniques, such as: qualitative analysis, titration, colorimetry, pH measurement, chromatography and protein, and nucleic acid electrophoresis;
- A.U.3. calculate molar and percent concentration of substances and compounds in the iso-osmotic solutions;
- A.U.4. describe changes in the function of the organism occurring upon alteration of homeostasis;
- A.U.5. predict direction of biochemical processes depending on the energetic status of the cell;
- A.U.6. describe anatomical bases of veterinary evaluation regarding inter-species variations;
- A.U.7. define physiological status of the animal as an adaptive process to environmental variability;
- A.U.8. under optical microscopy, differentiate and describe histological structures characteristic to organs, tissues and cells, relate their structure to function regarding inter-species variations;
- A.U.9. analyse genetic crosses and individual trait pedigrees from different species;
- A.U.10. conduct basic microbiological evaluation;
- A.U.11. select and implement rational, direct and conceptual antimicrobial chemotherapy regarding target animal species;

- A.U.12. effectively communicate with clients and veterinary surgeons;
- A.U.13. listen and explain in the language that is understandable and appropriate for the situation;
- A.U.14. formulate clear case studies and how to create documentation according to the current laws and regulations, in the form understandable for the owner of the animal and clear for other veterinary surgeons;
- A.U.15. operate in the interdisciplinary team;
- A.U.16. appropriately interpret responsibility of the veterinary surgeon towards animal, its owner, society and the environment;
- A.U.17. evaluate toxicological risk related to various technological directions of animal production;
- A.U.18. evaluates economical and sociological implications of the veterinary practice;
- A.U.19. implement professional skills in order to enhance the quality of veterinary care, animal welfare and public health;
- A.U.20. organise and maintain veterinary practice, calculate fees, issue official invoices, maintain fiscal records and use computer systems for effective communication, accumulation, processing, analysis and propagation of information;
- A.U.21. understand the need of continuous education for professional development;
- A.U.22. adapt professional offer to the dynamically changing situation on the work market;
- A.U.23. use the professional advice and help of the specialists or specialised units in difficult cases;

B. PROFESSIONAL EDUCATION

Regarding professional knowledge graduate knows and understands:

- B.W.1. disorders on the cellular, tissue, organ, system and organism levels occurring in the course of the disease;
- B.W.2. mechanisms of the organ and system pathologies;
- B.W.3. causes and symptoms of patomorphological changes, procedures for therapy and prevention in the particular diseases;
- B.W.4. diagnostic (including differential diagnostics) and therapeutic procedures;
- B.W.5. rules of clinical evaluation and animal health monitoring;

- B.W.6. how to interpret clinical data, results of the laboratory tests and other diagnostics techniques;
- B.W.7. appropriate law regulations, rules governing issuing of the verdicts and official opinions for the law courts, state, local and veterinary administration;
- B.W.8. official epizootic procedures in case of the law-regulated diseases;
- B.W.9. conditions of animal welfare;
- B.W.10. the interaction between parasite and host, general symptoms and patomorphological changes induced by parasites in the host organism;
- B.W.11. breeds within animal species, describes rules of animal husbandry and breeding;
- B.W.12. rules for animal selection for breeding, methods of breeding, reproductive biotechnology and husbandry selection;
- B.W.13. rules of animal feeding according to the species specifics and age;
- B.W.14. elaborate and analyse diet compositions;
- B.W.15. conditions for appropriate utilisation and disposal of animal by-products and management of waste from animal production;
- B.W.16. functioning of the State Veterinary Service, also in the aspect of public health prevention;
- B.W.17. rules of consumers health protection by the appropriate organ responsible for the production of foods of animal origin;
- B.W.18. HACCP (Hazard Analysis and Critical Control Points) procedures;
- B.W.19. procedures of ante-mortem and post-mortem examination of animals;
- B.W.20. conditions of hygiene and technology of animal production;
- B.W.21. regulations governing food production;
- B.W.22. rules of animal production economics.

Regarding professional skills graduate knows how to:

- B.U.1. handle animals in safe and humane way, and instructs others to do alike;
- B.U.2. conduct anamnesis in order to acquire precise information on animal or group of animals (heard), and their environment;
- B.U.3. carry out full clinical evaluation;

- B.U.4. perform first aid procedures for all animal species for haemorrhage, wounds, respiratory disorders, eye and ear injuries, loss of consciousness, anorexia, burns, tissue injuries, internal injuries and heart block;
- B.U.5. evaluate nutritional state of the animal and obtain information on proper animal nutrition;
- B.U.6. collect and safeguard the biological material, conduct basic laboratory analyses, properly evaluate and interpret results of laboratory analyses;
- B.U.7. use diagnostic devices including x-ray, ultrasound, endoscopy, according to its manuals and health and safety regulations concerning animals and humans, interpret the results obtained from those diagnostic devices;
- B.U.8. implement according official epizootic procedures in case of the law-regulated diseases;
- B.U.9. acquire and use information on registered veterinary pharmaceuticals;
- B.U.10. prescribe and use veterinary pharmaceuticals and medical materials, including their safe storage and utilisation;
- B.U.11. use methods of safe sedation, general and local anaesthesia, and methods for pain evaluation and relief;
- B.U.12. monitor patient status during surgery and intensive care upon the basic life parameters;
- B.U.13. choose the treatment adequate for the diagnosed disease;
- B.U.14. implement rules of aseptic and antiseptic surgery procedures, and use proper methods of tools sterilisation;
- B.U.15. evaluate the need for euthanasia, properly inform the owner of the animal and carry out the euthanasia procedure according to rules and obligations of professional ethics and proper care and utilisation of the body;
- B.U.16. carry out anatomopathological examination, prepare proper protocol, collect samples and safeguard them for transport;
- B.U.17. conduct ante-mortem and post-mortem examination of animals;
- B.U.18. evaluate quality of the products of animal origin;
- B.U.19. conduct epizootic investigation to establish onset and source of the infectious disease on farm before its diagnosis, identification of other involved farms, routes of

communication of people, animals, and farm implements that may facilitate disease transmission to or from the affected farm;

- B.U.20. use documentation of the health, welfare and, in certain cases, the productivity of animals (herd);
- B.U.21. prepare the preventive schemes according to the species specifics;
- B.U.22. evaluate the risk of chemical and biological contamination of foods of animal origin;
- B.U.23. collect samples for monitoring of presence of prohibited substances, chemical, biological, pharmaceutical and radioactive traces from animals, their secretions and excretions, tissues, products of animal origin, food, feed and water;
- B.U.24. evaluate the conditions of slaughter animal protection concerning various slaughter systems;
- B.U.25. evaluate the risk and prepare the procedures minimising the risk of contamination, cross-species infection and accumulation of the disease agents in veterinary facilities and the environment.

C. SUPPLEMENTARY EDUCATION

Regarding general knowledge graduate knows and understands:

- C.W.1. nomenclature and grammatic structure of at least one foreign language, considered a language of international communication on the minimal level of B2+ (Common European Framework of Reference for Languages, CEFR), including specialised nomenclature required for professional veterinary practice;
- C.W.2. functioning of institutions associated with veterinary profession and social role of veterinary surgeon;
- C.W.3. occupational health and safety regulations in veterinary practice.

Regarding general skills graduate knows how to:

- C.U.1. use at least one foreign language, considered a language of international communication, to formulate and understand written and spoken expression of both general and veterinary nature on the minimal level of B2+ (Common European Framework of Reference for Languages, CEFR), including specialised nomenclature required for professional veterinary practice;
- C.U.2. critically analyse veterinary literature and formulate conclusions based on available literature;
- C.U.3. utilise computer systems and current sources of veterinary knowledge for effective use

and process of information;

C.U.4. effectively communicate with authorities of control offices and local, and national government.

ASSESSMENT OF LEARNING OUTCOMES

Verification of learning outcomes requires varied formal assessment methods, appropriate to categories of knowledge, skills and social competences to which these outcomes refer to.

The achievement of learning outcomes in regard to knowledge can be evaluated with written and oral exams, review papers, dissertations and presentations.

Appropriate forms of written exams are as follows: essays, reports, short structured questions, multiple choice tests, multiple answer tests, true/false choice tests or answer matching tests.

The aim of oral exams is not merely to evaluate basic knowledge, but to verify the competences and skills in comprehension, analysis, information synthesis, problem solving and communication.

The verification of learning outcomes in regard to communication and procedural (manual) skills requires direct observation of the student performing certain task during exam.

CONCEPT OF EDUCATION

The concept and education aims for veterinary medicine are direct representation of policy for quality learning and strategy of WULS-SGGW formulated until 2020 and strategical aims of education. The five major strategic aims: *Improve education, Improve scientific research, Collaboration and internationalisation, Development of technology transfer, Finances and administration* formulate the guiding path which coherently, yet on multiple levels allow the concept of modern teaching and scientific activity in the scope of agricultural sciences in the discipline of veterinary medicine.

Study offering in veterinary medicine at the Faculty of Veterinary Medicine, WULS-SGGW formulates an answer to current social situation and challenges of global professional market. According to Strategy of development of WULS-SGGW, quality of education, “a guarantee for knowledgeable and skill-full graduate useful for the economic and intellectual development of the country”, results from systematic verification and improvement of study offering fulfilled within a wide collaboration with internal and external stakeholders.

Warsaw University of Life Sciences – SGGW “conducts scientific research within widely-defined frame of natural sciences as well as economical, humane and technical sciences” (Mission of

WULS-SGGW). Constant enhancement of scientific research, development of study offering, popularisation of research results, international collaboration via joint research actions and joint educational programs which coincides with the progress of the level of graduate – are the main aims of the University. Graduating students are knowledgeable and skill-full within distinct taught WULS-SGGW disciplines, as well as widely educated towards open opinion, tolerance, patriotism, honesty, scientific integrity and respect for all the people.

Concept of education for veterinary sciences and learning effects acquired during studies are based on the Regulation of the Ministry of Science and Higher Education from July 17th 2019, regarding education standards for veterinary profession, Faculty Teaching Quality Assurance and Improvement System for 2013-2020, requirements of the EAEVE (European Association of Establishments for Veterinary Education) and general European Guidelines for Higher Education.

Mission of the Faculty is to conduct actions promoting social development through state-of-the-art scientific research and constant development of professional staff. Furthermore, study offering for veterinary medicine reflects fluctuating needs and changes of the professional market through permanent collaboration with the socio-economic environment in the field of teaching and research activities.

Study offering for veterinary medicine through the careful and competent selection of programme content provides students of long-cycle Master's degree programme with:

- knowledge required to describe rules and mechanisms underlining animal health, disease and therapy, from the cellular level, through tissue, organ, organism to the whole animal population and ecosystem;
- competence in analysis and interpretation of clinical symptoms, patomorphology changes, and results of laboratory and supplementary diagnostics;
- competence in disease diagnosis (with specific impact on differential diagnostics);
- skills in therapeutic and prophylactic actions;
- competences in soft skills: problem solving, accumulation, elaboration and propagation of knowledge, working in the multidisciplinary team.

This concept predicts that graduate is at a basic competence level to conduct scientific and analytical tasks, and knows how to utilise acquired competences to adapt to the constantly changing global professional market in both private and public sectors.

ELECTIVE MODULES, CLINICAL ROTATIONS AND WORK PRACTICES IN THE EDUCATION PROGRAMME OF VETERINARY SCIENCES

According to the Regulation of the Ministry of Science and Higher Education from July 17th 2019, regarding education standards for veterinary profession (Dz. U. z 2019, poz. 1364), veterinary education is realised through the student participation in three distinct types of classes: lectures; practical classes;

clinical rotations and work practices. Basic and directional subjects are taught as mandatory and elective modules. Recruitment to the elective modules is realised through the eHMS system and are carried out within last two weeks prior to the new semester (including 1st semester). Student may pick any of the single (not blocked) modules or is obliged to pick one of the offered elective blocks (10th and 11th semesters).

Minimal clinical rotations included in the Ministry of Science and Higher Education regulations:

Type of the rotation	hours	ECTS
Avian diseases	30	2
Farm animal diseases	90	6
Equine diseases	90	6
Dog and cat diseases	90	6

Farm animal diseases rotation and Equine diseases rotation are realised within single modules of 90 curricular hours each, similarly Avian diseases rotation is realised as a single module of 30 hours. The rotation in dog and cat diseases is split into two modules: Rotation – dog and cat diseases of 85 curricular hours and Rotation – veterinary laboratory diagnostics of 15 hours. Exceeding Ministry regulations, following consultations with external stakeholders, the Rotation – laboratory class of parasitology was introduced with 15 curricular hours. All rotations excluding Rotation – veterinary laboratory diagnostics (which is realised at 11th semester) are scheduled for 10th semester.

Work practices:

According to the Regulation of the Ministry of Science and Higher Education from July 17th 2019 work practices in the veterinary education programme consider mandatory modules, of 15 ECTS total, oriented towards practical aspects of functioning and the role of veterinarian on animal production / reproduction farms, veterinary clinics, slaughterhouses and food of animal origin production facilities.

Type of work practice	Period	Time		ECTS
		weeks	hours	
Husbandry practice	after 4 th semester	2	80	1
Clinical practice module 1	after 8 th semester	4	160	5
Vet. inspection practice, slaughter house	after 8 th semester	2	80	2
Clinical practice module 2	after 10 th semester	4	160	5
Vet. inspection, meat hygiene	after 10 th semester	2	80	2

Considering the weight of the subject, from the 15 Ministry-regulated ECTS, the clinical practices

received highest number of the ECTS, followed by veterinary inspection practice and husbandry practice. All work practices are realised by external stakeholders. During work practice, student is obliged to fill in the summer practice diary, which must be authenticated by the external stakeholder. Within first two weeks of semester following the summer work practice, student undergoes examination with designated University teachers to obtain the grade which will be recorded in the eHMS system.

STUDY OFFERING SUCCEEDS FROM THE FOLLOWING ACTIONS:

- broad discussions within the staff of the Faculty of Veterinary Medicine (from the level of Division, Department, through Faculty Committee for Education to Faculty Council);
- adaptation of the programme to the current legal provisions;
- regular supervision of classes, semester analysis of learning outcomes, systematic discussions on class improvement;
- consultations with external stakeholders (employers, practice and rotation supervisors);
- regular monitoring of professional fate of graduates, meetings and consultations, and permanent communication with the WULS-SGGW Careers Office.

SKILLS AND COMPETENCES OF THE GRADUATE OF LONG-CYCLE MASTER'S DEGREE PROGRAMME IN VETERINARY MEDICINE

Graduate of long-cycle master's degree programme in veterinary medicine knows and understands disorders at the level of cell, tissue, organ, system and organism, knows the the factors underlying therapeutic and preventive actions in various diseases. He knows and understands legal acts and law regulations, rules governing issuing of the verdicts and official opinions for the law courts, state, local and veterinary administration as well as professional self-government. Knows how to conduct and implement official epizootic procedures in case of the law-regulated diseases and rules regarding well-being of animals. Possesses, general knowledge regarding animal selection for breeding, methods of breeding, reproductive biotechnology and husbandry selection. Knows the rules of animal feeding according to the species specifics and age. Understands conditions for appropriate utilisation and disposal of animal by-products and management of waste from animal production. Recognizes the State Veterinary Inspection, also in the aspect of public health prevention. Knows rules of consumers health protection by the appropriate organ responsible for the production of foods of animal origin and HACCP (Hazard Analysis and Critical Control Points) procedures.

Regarding professional skills, graduate knows how to handle animals in safe and humane way, and instructs others to do alike, conduct anamnesis in order to acquire precise information on animal or group of animals (heard), and their environment, finally carry out full clinical evaluation. Graduate perform first aid procedures for all animal species for haemorrhage, wounds, respiratory disorders, eye

and ear injuries, loss of consciousness, anorexia, burns, tissue injuries, internal injuries and heart block, collects and safeguards the biological material, conducts basic laboratory analyses, properly evaluates and interprets results of laboratory analyses. He is competent in the use of diagnostic devices including x-ray, ultrasound, endoscopy, according to its manuals and health and safety regulations concerning animals and humans, interpret the results obtained from those diagnostic devices. Is capable of implementation of adequate official epizootic procedures in case of the law-regulated diseases, acquires and uses information on registered veterinary pharmaceuticals, prescribes and uses veterinary pharmaceuticals and medical materials, knows how to safe storage and utilise them. Graduate is skilled in methods of safe sedation, general and local anaesthesia, and methods for pain evaluation and relief, and is capable to monitor patient status during surgery and intensive care upon the basic life parameters. Skills include implementation of rules of aseptic and antiseptic surgery procedures, and use of proper methods of tools sterilisation. Graduate can evaluate the need for euthanasia, properly informs the owner of the animal and carry out the euthanasia procedure according to rules and obligations of professional ethics and proper care and utilisation of the body. Knows how to perform patomorphological examination, prepare formal dissection protocol, collect samples and safeguard them for transport, how to conduct ante-mortem and post-mortem examination of animals and evaluation of quality of the products of animal origin. He is able to conduct epizootic investigation to establish onset and source of the infectious disease on farm before its diagnosis, identification of other involved farms, routes of communication of people, animals, and farm implements that may facilitate disease transmission to or from the affected farm, use documentation of the health, welfare and, in certain cases, the productivity of animals (herd), and prepare the preventive schemes according to the species specifics.

Other skills of a graduate include use of at least one foreign language, considered a language of international communication, to formulate and understand written and spoken expression of both general and veterinary nature on the minimal level of B2+ (Common European Framework of Reference for Languages, CEFR), including specialised nomenclature required for professional veterinary practice, critically analysis of veterinary literature and ability to formulate conclusions based on available literature by utilisation of computer systems and current sources of veterinary knowledge in effective use and process of information. Finally, graduate knows how to effectively communicate with authorities of control offices and local, and national government.

STUDY OFFERING – attachment No 1

LEARNING OUTCOMES MATRIX – attachment No 2

OPINION OF THE STUDENT COUNCIL – attachment No 3

SYLLABI OF THE MODULES – attachment No 4

STUDY OFFERING, CURRICULUM HOUR MATRIX

Unit: Faculty of Veterinary Medicine
Field of studies: Veterinary Medicine

Level of study: Long-cycle Master's degree programme
Profile of study: General Academic (GA)

YEAR 1, SEMESTER 1

No	Year	Sem.	Old catalogue number	New catalogue number	I			II		III		Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours
					Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module												
1	1	1	B7/1	FVM-V-JMSS-01W-B07/1_19	B	m	GA	Animal anatomy module 1	30	60						8	4	240	90	
2	1	1	B6/1	FVM-V-JMSS-01W-B06/1_19	B	m	GA	Histology and embryology module 1	15	15						5	2	190	30	
3	1	1	B2	FVM-V-JMSS-01W-B02_19	B	m	GA	Cell biology	15	15						2	1	45	30	
4	1	1	B1	FVM-V-JMSS-01W-B01_19	B	m	GA	Biology	30							2	1	30	30	
5	1	1	A3	FVM-V-JMSS-01W-A03_19	B	m		Information technology		30						2	1	52	30	
6	1	1	B4	FVM-V-JMSS-01W-B04_19	B	m	GA	Biophysics	30							2	1	42	30	
7	1	1	A4	FVM-V-JMSS-01W-A04_19	B	m		Latin		30						2	1	30	30	
8	1	1	B5	FVM-V-JMSS-01W-B05_19	B	m	GA	Chemistry	15	30						3	2	75	45	
9	1	1	A7/1	FVM-V-JMSS-01W-A07/1_19	B	m		Physical education module 1		30						0	0	0	30	
10	1	1	A8	FVM-V-JMSS-01W-A08_19	S	m	GA	Copyrights in academia	15							1	1	30	15	
11	1	1	A2	FVM-V-JMSS-01W-A02_19	B	e	GA	Molecular cell physiology	30							2	1	45	30	
12	1	1	E6	FVM-V-JMSS-01W-E06_19	S	e		Intercultural communication	30							2	1	45	30	
13	1	1	E65	FVM-V-JMSS-01W-E65_19	B	e	GA	Calculus	7	8						1	1	30	15	
14	1	1	A6/2	FVM-V-JMSS-01W-A06/2_19	B	e		English language for university student		15						1	1	30	15	
15	1	1	E95	FVM-V-JMSS-01W-E95_19	S	e		Successful learning	15							1	1	30	15	
16	1	1	E96	FVM-V-JMSS-01W-E96_19	S	e		Critical thinking	15							1	1	30	15	
17	1	1	A6/1	FVM-V-JMSS-01W-A06/1_19	S	e		Polish language		30						2	1	45	30	

Sum of hours: 247 263 0 0 0
ECTS social sciences: 7 ECTS electives: 10 ECTS total: 37 21 Curricular hours: 510
Hours: 510

ECTS for student:

ECTS social sciences: 7 ECTS electives: 10 ECTS total: 37 21

YEAR 1, SEMESTER 2

No	Year	Sem.	Old catalogue number	New catalogue number	I			II		III		Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours
					Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module												
18	1	2	B7/2	FVM-V-JMSS-02S-B07/2_19	B	m	GA	Animal anatomy module 2	30	60						8	4	370	90	
19	1	2	B6/2	FVM-V-JMSS-02S-B06/2_19	B	m	GA	Histology and embryology Module 2	30	30						5	3	190	60	
20	1	2	B3/1	FVM-V-JMSS-02S-B03/1_19	B	m	GA	Biochemistry module 1	15	45						4	3	100	60	
21	1	2	B12	FVM-V-JMSS-02S-B12_19	B	m	GA	General and veterinary genetics	15	15						2	1	45	30	
22	1	2	B18	FVM-V-JMSS-02S-B18_19	B	m		Environmental protection	30							2	1	60	30	
23	1	2	B19	FVM-V-JMSS-02S-B19_19	B	m	GA	Biostatistics and methods of documentation	15	15						2	1	60	30	
24	1	2	D29	FVM-V-JMSS-02S-D29_19	D	m	GA	History of veterinary and deontology	30							2	1	60	30	
25	1	2	D1	FVM-V-JMSS-02S-D01_19	D	m		Agronomy	15							1	1	28	15	
26	1	2	A7/2	FVM-V-JMSS-02S-A07/2_19	B	m		Physical education module 2		30						0	0	0	30	
27	1	2	A5/1	FVM-V-JMSS-02S-A05/1_19	S	m		Polish language module 1		30						2	1	35	30	
28	1	2	E7	FVM-V-JMSS-02S-E07_19	D	e	GA	Aquaculture and exotic animals care	30							2	1	45	30	
29	1	2	E68	FVM-V-JMSS-02S-E68_19	D	e	GA	Breeds and varieties of dogs and cats	15							1	1	30	15	

Sum of hours: 225 225 0 0 0
ECTS social sciences: 2 ECTS electives: 3 ECTS total: 31 18 Curricular hours: 450
Hours: 450

ECTS for student:

ECTS social sciences: 2 ECTS electives: 3 ECTS total: 31 18

YEAR 2, SEMESTER 3

No	Year	Sem.	Old catalogue number	New catalogue number	Type of the module (Basic/ Directional/ Social sciences)	I		II		III		Module	Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours	
						Mandatory	Elective	General academic /	Practical													
30	2	3	B3/2	FVM-V-JMSS-03W-B03/2_19	B	m		GA				Biochemistry module 2	30	45					6	3	150	75
31	2	3	B9/1	FVM-V-JMSS-03W-B09/1_19	B	m		GA				Animal physiology module 1	30	39	6				6	4	89	75
32	2	3	D2	FVM-V-JMSS-03W-D02_19	D	m		GA				Animal husbandry and breeding	30	15					3	2	60	45
33	2	3	D3	FVM-V-JMSS-03W-D03_19	D	m		GA				Technologies in animal production	30						2	1	36	30
34	2	3	D6	FVM-V-JMSS-03W-D06_19	D	m						Ethology	30						2	1	50	30
35	2	3	D8	FVM-V-JMSS-03W-D08_19	D	m						Veterinary economics	15						1	1	25	15
36	2	3	B13	FVM-V-JMSS-03W-B13_19	B	m		GA				Veterinary epidemiology		30					2	1	60	30
37	2	3	A5/2	FVM-V-JMSS-03W-A05/2_19	S	m						Polish language module 2		60					2	1	65	60
38	2	3	B10/1	FVM-V-JMSS-03W-B10/1_19	B	m		GA				Veterinary microbiology module 1	30	45					5	4	150	75
39	2	3	A1	FVM-V-JMSS-03W-A01_19	B	e		GA				Comparative anatomy		45					4	2	120	45
40	2	3	E69	FVM-V-JMSS-03W-E69_19	D	e		GA				Medical botany	15						1	1	30	15

Sum of hours: 210 279 6 0 0

ECTS social sciences: 2 ECTS electives: 5 ECTS total: 34 21 Curricular hours: 495

ECTS for student: ECTS social sciences: 2 ECTS electives: 5 ECTS total: 34 21 Hours: 495

YEAR 2, SEMESTER 4

No	Year	Sem.	Old catalogue number	New catalogue number	Type of the module (Basic/ Directional/ Social sciences)	I		II		III		Module	Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours	
						Mandatory	Elective	General academic /	Practical													
41	2	4	B9/2	FVM-V-JMSS-04S-B09/2_19	B	m		GA				Animal physiology module 2	30	39	6				6	4	89	75
42	2	4	B10/2	FVM-V-JMSS-04S-B10/2_19	B	m		GA				Veterinary microbiology module 2	30	45					5	4	150	75
43	2	4	D4	FVM-V-JMSS-04S-D04_19	D	m		GA				Animal nutrition and feeding	30	20	6	4			4	2	109	60
44	2	4	A5/3	FVM-V-JMSS-04S-A05/3_19	S	m						Polish language module 3		60					2	1	65	60
45	2	4	B11	FVM-V-JMSS-04S-B11_19	B	m		GA				Immunology	15	15	15				4	3	97	45
46	2	4	B8	FVM-V-JMSS-04S-B08_19	B	m		GA				Topographic anatomy	15	24	6				4	2	120	45
47	2	4	E8	FVM-V-JMSS-04S-E08_19	B	e		GA				Physiology of exercise	30						2	1	50	30
48	2	4	E97	FVM-V-JMSS-04S-E97_19	D	e		GA				Principles of animal handling		30					2	1	60	30
49	2	4	WP1	FVM-V-JMSS-04S-WP1_19	D	sp		GA				Husbandry practice (summer practice)				80			1	0	80	80

Sum of hours: 150 233 33 84 0

ECTS social sciences: 2 ECTS electives: 4 ECTS total: 30 18 Curricular hours: 500

ECTS for student: ECTS social sciences: 2 ECTS electives: 4 ECTS total: 30 18 Hours: 500

YEAR 3, SEMESTER 5

No	Year	Sem.	Old catalogue number	New catalogue number	I			II		III		Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours
					Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module	Module	Module										
50	3	5	B14	FVM-V-JMSS-05W-B14_19	B	m	GA	Animal pathophysiology			60	39	6			10	6	300	105	
51	3	5	B15/1	FVM-V-JMSS-05W-B15/1_19	B	m	GA	Veterinary pharmacology module 1			30	30				4	2	175	60	
52	3	5	D13/1	FVM-V-JMSS-05W-D13/1_19	D	m	GA	Parasitology and invasiology module 1			30	30				5	2	100	60	
53	3	5	D11/1	FVM-V-JMSS-05W-D11/1_19	D	m	GA	Pathomorphology module 1			30	45				8	3	200	75	
54	3	5	A5/4	FVM-V-JMSS-05W-A05/4_19	S	m		Polish language module 4				30				2	1	35	30	
55	3	5	D10/1	FVM-V-JMSS-05W-D10/1_19	D	m	GA	Clinical and laboratory diagnostics Module 1			30	30				3	2	90	60	
56	3	5	E11	FVM-V-JMSS-05W-E11_19	D	e	GA	Veterinary virology			15					1	1	25	15	
57	3	5	E10	FVM-V-JMSS-05W-E10_19	D	e	GA	Bacteriological and mycological laboratory diagnostics of skin infections in dogs and cats				15				1	1	30	15	
58	3	5	E77	FVM-V-JMSS-05W-E77_19	D	e	GA	One Health in veterinary practice			15					1	1	30	15	

Sum of hours: 210 219 6 0 0
 ECTS social sciences: 2 ECTS electives: 3 ECTS total: 35 19 Curricular hours: 435
 ECTS for student: ECTS social sciences: 2 ECTS electives: 3 ECTS total: 35 19 Hours: 435

YEAR 3, SEMESTER 6

No	Year	Sem.	Old catalogue number	New catalogue number	I			II		III		Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours
					Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module	Module	Module										
59	3	6	B15/2	FVM-V-JMSS-06S-B15/2_19	B	m	GA	Veterinary pharmacology module 2			15	45				4	2	175	60	
60	3	6	D11/2	FVM-V-JMSS-06S-D11/2_19	D	m	GA	Pathomorphology module 2			30	45				8	3	200	75	
61	3	6	B16	FVM-V-JMSS-06S-B16_19	B	m	GA	Veterinary pharmacy			15					1	1	25	15	
62	3	6	D12	FVM-V-JMSS-06S-D12_19	D	m	GA	General surgery and anesthesiology			15	30				3	2	90	45	
63	3	6	D9	FVM-V-JMSS-06S-D09_19	D	m	GA	Diagnostic imaging			15	45				3	2	118	60	
64	3	6	D27	FVM-V-JMSS-06S-D27_19	D	m	GA	Response to public health related disasters			15	15				2	1	56	30	
65	3	6	D13/2	FVM-V-JMSS-06S-D13/2_19	D	m	GA	Parasitology and invasiology module 2			15	30				3	2	80	45	
66	3	6	D10/2	FVM-V-JMSS-06S-D10/2_19	D	m	GA	Clinical and laboratory diagnostics module 2			30	30				4	2	60	60	
67	3	6	D21	FVM-V-JMSS-06S-D21_19	D	m	GA	Bee diseases			15	8		7		1	1	40	30	
68	3	6	E13	FVM-V-JMSS-06S-E13_19	B	e	GA	Advances in biomedical sciences - joint course					15			2	1	45	15	
69	3	6	E71	FVM-V-JMSS-06S-E71_19	B	e	GA	Experimental immunology			6	3	6			1	1	30	15	

Sum of hours: 171 251 21 7 0
 ECTS social sciences: 0 ECTS electives: 3 ECTS total: 32 18 Curricular hours: 450
 ECTS for student: ECTS social sciences: 0 ECTS electives: 3 ECTS total: 32 18 Hours: 450

YEAR 4, SEMESTER 7

No	Year	Sem.	Old catalogue number	New catalogue number	I			II			III			Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours	
					Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module	Module	Module													
70	4	7	D16	FVM-V-JMSS-07W-D16_19	D	m	GA	Farm animal diseases					105	129		21			15	10	375	255	
71	4	7	D22/1	FVM-V-JMSS-07W-D22/1_19	D	m	GA	Meat hygiene module 1				15	45					3	2	100	60		
72	4	7	D11/3	FVM-V-JMSS-07W-D11/3_19	D	m	GA	Pathomorphology module 3				30	30					8	3	200	60		
73	4	7	D26	FVM-V-JMSS-07W-D26_19	D	m	GA	Feed hygiene				20			10			2	1	56	30		
74	4	7	E46	FVM-V-JMSS-07W-E45_19	D	e	GA	Radiographic anatomy of dog and cat					15					1	1	30	15		
75	4	7	E50	FVM-V-JMSS-07W-E50_19	D	e	GA	Clinical and functional neuroanatomy in dogs and cats					15					1	1	30	15		
76	4	7	E78	FVM-V-JMSS-07W-E78_19	D	e	GA	Management of laboratory animal facility				15						1	1	30	15		
Sum of hours:													185	234	0	31	0						

ECTS social sciences: 0 ECTS electives: 3 ECTS total: 31 19 Curricular hours: 450
 ECTS social sciences: 0 ECTS electives: 3 ECTS total: 31 19 Hours: 450

YEAR 4, SEMESTER 8

No	Year	Sem.	Old catalogue number	New catalogue number	I			II			III			Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours	
					Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module	Module	Module													
77	4	8	D15	FVM-V-JMSS-08S-D15_19	D	m	GA	Equine diseases				60	120						12	7	300	180	
78	4	8	D22/2	FVM-V-JMSS-08S-D22/2_19	D	m	GA	Meat Hygiene module 2				15	30					4	2	90	45		
79	4	8	D25	FVM-V-JMSS-08S-D25_19	D	m	GA	Zoonoses				15						1	1	25	15		
80	4	8	B17	FVM-V-JMSS-08S-B17_19	B	m	GA	General toxicology				30	30					3	2	75	60		
81	4	8	D17	FVM-V-JMSS-08S-D17_19	D	m	GA	Andrology and artificial insemination				14	20		6			3	2	80	40		
82	4	8	B20	FVM-V-JMSS-08S-B20_19	B	m	GA	Veterinary jurisprudence				15		15				2	1	60	30		
83	4	8	D20	FVM-V-JMSS-08S-D20_19	D	m	GA	Fish diseases				15	10					1	1	25	25		
84	4	8	E19	FVM-V-JMSS-08S-E19_19	D	e	GA	Clinical immunology						15				1	1	30	15		
85	4	8	E85	FVM-V-JMSS-08S-E85_19	D	e	GA	Clinical haematology				3	12					1	1	30	15		
86	4	8	WP2	FVM-V-JMSS-08S-WP2_19	D	sp	GA	Clinical practice module 1 (summer practice)								160		5	0	160	160		
87	4	8	WP3	FVM-V-JMSS-08S-WP3_19	D	sp	GA	Vet. inspection practice, slaughter house (summer practice)							80			2	0	80	80		
Sum of hours:													167	222	30	246	0						

ECTS social sciences: 0 ECTS electives: 2 ECTS total: 35 18 Curricular hours: 665
 ECTS social sciences: 0 ECTS electives: 2 ECTS total: 35 18 Hours: 665

YEAR 5, SEMESTER 9

No	Year	Sem.	Old catalogue number	New catalogue number	I			II			III			Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours	
					Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module	Module	Module													
88	5	9	D14	FVM-V-JMSS-09W-D14_19	D	m	GA	Dog and cat diseases				75	150						14	9	450	225	
89	5	9	D5	FVM-V-JMSS-09W-D05_19	D	m	GA	Dietetics				15		15					1	1	40	30	
90	5	9	D18	FVM-V-JMSS-09W-D18_19	D	m	GA	Avian diseases				45	45						6	3	180	90	
91	5	9	D28	FVM-V-JMSS-09W-D28_19	D	m	GA	Administration and legal aspects in veterinary				15		30					2	1	60	45	
92	5	9	D19	FVM-V-JMSS-09W-D19_19	D	m	GA	Fur animals diseases				10	9		6				1	1	35	25	
93	5	9	D23/1	FVM-V-JMSS-09W-D23/1_19	D	m	GA	Hygiene of food of animal origin module 1				30	45						4	3	195	75	
94	5	9	E20	FVM-V-JMSS-09W-E20_19	D	e	GA	Clinical toxicology of large animals				15							1	1	25	15	
95	5	9	E21	FVM-V-JMSS-09W-E21_19	D	e	GA	Clinical toxicology of small animals				15							1	1	25	15	
96	5	9	E80	FVM-V-JMSS-09W-E80_19	D	e	GA	Veterinary at the border control				6	6		3				1	1	30	15	
97	5	9	E84	FVM-V-JMSS-09W-E84_19	D	e	GA	Reptile and amphibian dietetics				15							1	1	30	15	
												Sum of hours:	241	255	45	9	0						

ECTS social sciences: 0 ECTS electives: 4 ECTS total: 32 22 Curricular hours: 550
 ECTS for student: ECTS social sciences: 0 ECTS electives: 2 ECTS total: 30 20 Hours: 520

YEAR 5, SEMESTER 10

No	Year	Sem.	Old catalogue number	New catalogue number	I			II			III			Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours
					Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module	Module	Module												
98	5	10	D7	FVM-V-JMSS-10S-D07_19	D	m	GA	Veterinary prevention				45	25		5				5	3	137	75
99	5	10	D23/2	FVM-V-JMSS-10S-D23/2_19	D	m	GA	Hygiene of food of animal origin module 2				15	30						4	2	105	45
100	5	10	D24	FVM-V-JMSS-10S-D24_19	D	m	GA	Milk hygiene				15	15						2	1	56	30
101	5	10	R2	FVM-V-JMSS-10S-R02_19	D	m	GA	Rotation - Farm animal diseases						90					4	3	142	90
102	5	10	R3	FVM-V-JMSS-10S-R03_19	D	m	GA	Rotation - Dog and cat diseases					85						6	3	170	85
103	5	10	R4	FVM-V-JMSS-10S-R04_19	D	m	GA	Rotation - Equine diseases					50		40				4	3	142	90
104	5	10	R1	FVM-V-JMSS-10S-R01_19	D	m	GA	Rotation - Avian diseases					30						2	1	60	30
105	5	10	R6	FVM-V-JMSS-10S-R06_19	D	m	GA	Rotation - Laboratory class of parasitology					7.5	7.5					2	1	25	15
Block I: Small Animal Electives [4 ECTS]																						
106	5	10	E23	FVM-V-JMSS-10S-E23_19	D	e	GA	Behavioural medicine of cats and dogs				15		15					2	1	45	30
107	5	10	E15	FVM-V-JMSS-10S-E15_19	D	e	GA	Clinical and laboratory diagnostics in emergency veterinary medicine					5	10					1	1	30	15
108	5	10	E52	FVM-V-JMSS-10S-E52_19	D	e	GA	Differential diagnostics based on laboratory results				15							1	1	30	15
Block II: Large Animal Electives [4 ECTS]																						
109	5	10	E81	FVM-V-JMSS-10S-E81_19	D	e	GA	Behavioural medicine of horses					15						1	1	30	15
110	5	10	E12	FVM-V-JMSS-10S-E12_19	D	e	GA	Veterinary of pig herd				2			13				1	1	30	15
111	5	10	E38	FVM-V-JMSS-10S-E38_19	D	e	GA	Veterinary of the racing horse				15			15				2	1	45	30
Block III: Food Hygiene Electives [4 ECTS]																						
112	5	10	E51	FVM-V-JMSS-10S-E51_19	D	e	GA	Management of seafood safety				15							1	1	30	15
113	5	10	E42	FVM-V-JMSS-10S-E42_19	D	e	GA	Management of food and feed safety				15							1	1	30	15
114	5	10	E83	FVM-V-JMSS-10S-E83_19	D	e	GA	Nutraceuticals in farm animals				15							1	1	30	15
115	5	10	E17	FVM-V-JMSS-10S-E17_19	D	e	GA	Applied pharmacology of farm animals				15							1	1	30	15

YEAR 5, SEMESTER 10

No	Year	Sem.	Old catalogue number	New catalogue number	Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module	Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours		
																		Other Electives [4 ECTS]	
116	5	10	E43	FVM-V-JMSS-10S-E43_19	D	e	GA	Ophthalmology in small animals	3	12				1	1	31	15		
117	5	10	E86	FVM-V-JMSS-10S-E86_19	D	e	GA	Breed-related disorders	15					1	1	30	15		
118	5	10	E14	FVM-V-JMSS-10S-E14_19	D	e	GA	From symptoms to diagnosis - skin			15			1	1	30	15		
119	5	10	E89	FVM-V-JMSS-10S-E89_19	D	e	GA	Veterinary otology	6	9				1	1	30	15		
120	5	10	WP4	FVM-V-JMSS-10S-WP4_19	D	sp	GA	Clinical practice module 2 (summer practice)				160		5	0	160	160		
121	5	10	WP5	FVM-V-JMSS-10S-WP5_19	D	sp	GA	Veterinary inspection, meat hygiene (summer practice)				80		2	0	85	80		
Sum of hours:									206	283.5	47.5	403	0						
ECTS social sciences:									0	ECTS electives:		16	ECTS total:		52	31	Curricular hours:		940
ECTS for student:									0	ECTS electives:		8	ECTS total:		44		Hours:		820

YEAR 6, SEMESTER 11

No	Year	Sem.	Old catalogue number	New catalogue number	Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module	Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours
122	6	11	R5	FVM-V-JMSS-11W-R05_19	D	m	GA	Rotation - Veterinary laboratory diagnostics		15				2	1	30	15
123	6	11	D30	FVM-V-JMSS-11W-D30_19	D	m	GA	Herd health management	30	33		12		2	1	75	75
Block I: Small Animal Electives [9 ECTS]																	
124	6	11	E22	FVM-V-JMSS-11W-E22_19	D	e	GA	Cardiology diagnostics in small animals	15					1	1	28	15
125	6	11	E24	FVM-V-JMSS-11W-E24_19	D	e	GA	Small animal bone and joint surgery		30				2	1	50	30
126	6	11	E53	FVM-V-JMSS-11W-E53_19	D	e	GA	Daily clinical practice		15				1	1	30	15
127	6	11	E37	FVM-V-JMSS-11W-E37_19	D	e	GA	Clinical course of small animal surgery		15				1	1	30	15
128	6	11	E54	FVM-V-JMSS-11W-E54_19	D	e	GA	Small animal dermatology	6	9				1	1	30	15
129	6	11	E29	FVM-V-JMSS-11W-E29_19	D	e	GA	Small animal dentistry	6	9				1	1	30	15
130	6	11	E36	FVM-V-JMSS-11W-E36_19	D	e	GA	Surgery of genital organs of dogs and cats (solo castration)	15	15				2	1	45	30
Block II: Large Animal Electives [9 ECTS]																	
131	6	11	E55	FVM-V-JMSS-11W-E55_19	D	e	GA	Equine diseases - clinical cases		8		7		1	1	30	15
132	6	11	E56	FVM-V-JMSS-11W-E56_19	D	e	GA	Common surgical procedures in horses		16				1	1	30	16
133	6	11	E31	FVM-V-JMSS-11W-E31_19	D	e	GA	Ultrasound diagnostics of the reproductive tract in farm animals	4	26				2	1	45	30
134	6	11	E57	FVM-V-JMSS-11W-E57_19	D	e	GA	Horse dentistry	9	6				1	1	30	15
135	6	11	E58	FVM-V-JMSS-11W-E58_19	D	e	GA	Horse arthroscopy	8	7				1	1	30	15
136	6	11	E76	FVM-V-JMSS-11W-E76_19	D	e	GA	Hoof management in cattle		3		12		1	1	30	15
137	6	11	E59	FVM-V-JMSS-11W-E59_19	D	e	GA	Mastitis prevention and treatment in dairy herds	5	25				2	1	45	30
Block III: Advanced Imaging Electives [3 ECTS]																	
138	6	11	E44	FVM-V-JMSS-11W-E44_19	D	e	GA	Veterinary oncology			15			1	1	30	15
139	6	11	E39	FVM-V-JMSS-11W-E39_19	D	e	GA	Ultrasound diagnostics in companion animals		15				1	1	30	15
140	6	11	E60	FVM-V-JMSS-11W-E60_19	D	e	GA	Imaging diagnostics in companion animals		15				1	1	30	15
Block IV: Advanced Internal Medicine Electives [3 ECTS]																	
141	6	11	E61	FVM-V-JMSS-11W-E61_19	D	e	GA	Management of life-threatening situations in small animal anaesthesia			15			1	1	30	15
142	6	11	E30	FVM-V-JMSS-11W-E30_19	D	e	GA	Intensive care of dogs and cats		15				1	1	30	15
143	6	11	E62	FVM-V-JMSS-11W-E62_19	D	e	GA	From symptoms to diagnosis - advanced course			15			1	1	30	15

YEAR 6, SEMESTER 11

No	Year	Sem.	Old catalogue number	New catalogue number	I		II		III		Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours
					Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module											
Other Electives [10 ECTS]																			
144	6	11	E4	FVM-V-JMSS-11W-E04_19	D	e	GA	Communication and negotiations skills in veterinary practice	5	10					1	1	25	15	
145	6	11	E41	FVM-V-JMSS-11W-E41_19	D	e	GA	Exotic animals medicine	24	6					2	1	45	30	
146	6	11	E63	FVM-V-JMSS-11W-E63_19	D	e	GA	Clinical course of exotic animal diseases (ZOO)	9				21		2	1	60	30	
147	6	11	E32	FVM-V-JMSS-11W-E32_19	D	e		Management of veterinary practice	7	8					1	1	30	15	
148	6	11	E64	FVM-V-JMSS-11W-E64_19	D	e	GA	Introduction to cynology and dog show essentials	12	1	2				1	1	30	15	
149	6	11	E34	FVM-V-JMSS-11W-E34_19	D	e	GA	Herd health management in small ruminants	5	10			15		2	1	45	30	
150	6	11	E74	FVM-V-JMSS-11W-E74_19	D	e	GA	Clinical anaesthesiology		15					1	1	30	15	
151	6	11	E83	FVM-V-JMSS-10S-E83_19	D	e	GA	Nutraceuticals in farm animals	15						1	1	30	15	

Sum of hours: 175 327 47 67 0
 ECTS social sciences: 0 ECTS electives: 55 ECTS total: 59 35 Curricular hours: 1066
 ECTS for student: ECTS social sciences: 0 ECTS electives: 42 ECTS total: 46 Hours: 871

Total curricular hours excluding research project: 6511 , including research project: 6961

Total offered ECTS: 428 Social sciences: 15 Electives: 128
 Max ECTS per student: 385 Social sciences: 15 Electives: 105
 Min ECTS per student: 360 Social sciences: 12 Electives: 80

YEAR 6, SEMESTER 11

No	Year	Sem.	Old catalogue number	New catalogue number	I		II		III		Lectures	Practicals	Seminars	Field exercises	e-learning	ECTS	ECTS_k	Estimated hours for ECTS	Curricular hours
					Type of the module (Basic/ Directional/ Social sciences)	Mandatory Elective	General academic / Practical	Module											
152	6	11	E66	FVM-V-JMSS-11W-E66_19	B	e	GA	Individual research project, completed with dissertation		450					20	5	450	450	

Sum of hours: 0 450 0 0 0
 ECTS social sciences: 0 ECTS electives: 20 ECTS total: 20 5 Curricular hours: 450

W_NK7	collects, analyses and correctly interprets clinical data, results of the laboratory tests and other diagnostics techniques	3	3			3		2	3		3		3	3
W_NK8	indicates and interprets appropriate law regulations, knows rules governing issuing of the verdicts and creates official opinions for the law courts, state, local and veterinary administration							2		3				
W_NK9	knows bases of the functioning of state veterinary service, also in the aspect of public health prevention	3												

Animal production

W_PZ1	describes breeds within animal species, describes rules of animal husbandry and breeding													
W_PZ2	describes rules for animal selection for breeding, methods of breeding and selection								3					
W_PZ3	describes rules of animal feeding (according to the species specifics), elaborates and analyses diet compositions													
W_PZ4	describes and evaluates conditions for animal welfare		3											2
W_PZ5	describes and interprets rules of produce economics													
W_PZ6	describes conditions for appropriate utilisation and disposal of animal by-products and management of waste from animal production	3	3		1									2

Food hygiene

W_HZ1	describes and interprets methods of consumers health protection by the appropriate organ responsible for the production of foods of animal origin	3	3			3								3
W_HZ2	describes, interprets and evaluates conditions of hygiene and technology of production, food safety, also uses appropriate law regulations of the veterinary supervision	3	3			3	2							3
W_HZ3	conducts ante-mortem and post-mortem examination of animals		3			3								3
W_HZ4	describes and implies HACCP (Hazard Analysis and Critical Control Points) procedures		3			3								3

SKILLS

Graduate knows how to: basic professional skills

U_OUZ1	effectively communicates with clients, veterinary surgeons and employees of the state sanitary control, state and local administration			2						3				3
U_OUZ2	knows how to listen and explain in the language that is understandable and appropriate for the situation			2								3	2	3
U_OUZ3	formulates clear case studies and knows how to create documentation according to the current laws and regulations, in the form understandable for the owner of the animal and clear for other veterinary surgeons		3			2						3	3	3
U_OUZ4	knows how to operate in the interdisciplinary team			2								3	2	
U_OUZ5	appropriately interprets responsibility of the veterinary surgeon towards animal, its owner, society and environment				2			2		3	2	3		
U_OUZ6	evaluates economical and sociological implications of the veterinary practice											3		
U_OUZ7	understands the need of the best possible utilisation of professional skills in order to enhance the quality of veterinary care, animal welfare and public health							2				3	2	

Graduate knows how to organise and implement veterinary practice, including:

U_OUZ8	knows self and employer responsibilities and obligations in light of the law and occupational health and safety regulations					3		2		3			2	
U_OUZ9	can calculate fees, knows how to issue an official invoice and respects rules of proper financial and medical documentation													
U_OUZ10	uses computer systems for effective communication, accumulation, processing, analysis and propagation of information													3
U_OUZ11	acts within the current standards and ethical obligations													3
U_OUZ12	understands the need of continuous education for professional development											3		3
U_OUZ13	can adapt professional offer to the dynamically changing situation on the work market													
U_OUZ14	knows his limitations and knows how to use the professional advice and help of the specialists or specialised units in difficult cases													
U_OUZ15	uses English and Latin medical nomenclature				1									
U_OUZ16	can communicate in Polish and knows how to use Polish professional source materials			2	1									

practical professional skills

U_PUZ1	performs veterinary investigation in order to acquire precise information on single animal and group of animals (heard), and their environment	2					2						2	3
U_PUZ2	handles animals in safe and humane way, and instructs others to do alike													
U_PUZ3	carries out full clinical evaluation	3			1	3								3

Warszawa, 10.09.2019r.

Opinia Samorządu Studentów Wydziału Medycyny Weterynaryjnej o nowym programie studiów jednolitych studiów magisterskich stacjonarnych i niestacjonarnych na kierunku Weterynaria od roku 2019/20

Przedstawiony przez Komisję ds. Dydaktyki nowy program jednolitych studiów magisterskich na kierunku Weterynaria (od roku 2019/20) został – w ocenie Samorządu Wydziałowego – uznany za pozytywną zmianę w stosunku do obecnie realizowanego programu studiów.

Nowy program pozwala na podniesienie i podkreślenie znaczenia wiedzy weterynaryjnej oraz jej praktycznego zastosowania w pracy zawodowej. Naszym zdaniem proponowany program jednolitych studiów magisterskich tworzy szeroką i bardziej zróżnicowaną ofertę programową, pozwalając tym samym na lepsze przygotowanie studentów do wykonywania zawodu lekarza.

W zaproponowanym programie studiów za szczególnie cenne uważamy:

- wprowadzenie nowych przedmiotów (modele komunikacyjne w relacji lekarz-właściciel, etyka zawodowa lekarza weterynarii), które poszerzają naszą wiedzę w zakresie kompetencji społecznych
- wprowadzenie przedmiotów, które zostały zaproponowane przez studentów tj. Neonatologia małych zwierząt, Nowoczesne techniki obrazowania, czy Geriatria psów i kotów. Dzięki takim zabiegom, Wydział postępuje wspólnie z rozwojem w dziedzinie weterynarii
- poszerzenie wiedzy i umiejętności z zakresu technik obrazowania dla różnych gatunków zwierząt, co przygotuje nas w dużym stopniu do lepszego analizowania jednego z podstawowych w weterynarii badań diagnostycznych

Podsumowując: w naszej opinii przygotowany program studiów w interesujący sposób łączy wiedzę z praktyką oraz wymagania uniwersyteckie z koniecznością przygotowania zawodowego studentów. Uważamy, że program ten będzie bardziej atrakcyjny dla kandydatów na studia na kierunku Weterynaria niż aktualnie obowiązujący.

W imieniu RWSS WMW SGGW

Przewodnicząca Rady Wydziałowej
Samorządu Studentów SGGW
Wydziału Medycyny Weterynaryjnej
Katarzyna Opalczyńska
Katarzyna Opalczyńska