Course:

ANIMAL BREEDS CHARACTERISTICS

UNIVERSITY OF ZAGREB FACULTY OF VETERINARY MEDICINE Heinzelova 55

Tel. 01/2390224

Division: Animal Production and Biotechnology

Organizational unit: Animal Breeding and Livestock Production

E-mail of the course leader: smencik@vef.unizg.hr Register No of the organisational unit: 61-09-2022-22

Zagreb, 06/02/2023



160814 REPUBLIKA HRVATSKA Veterinarski fakultet u Zagrebu

Primljeno: 28.02.2023 Klasifikacijska oznaka

naka Org. jed. 251-61-32;

605-03/22-04/35 Urudžbeni broj 251-61-09-23-84

Prilozi Vrijednost

COURSE SYLLABUS

Course name: Animal Breeds Characteristics

Academic year 2022/2023

Course leader: Associate Professor Sven Menčik, PhD

Deputy course leader: Full Professor (permanent) Anamaria Ekert Kabalin, PhD

Teachers: Full Professor (permanent) Anamaria Ekert Kabalin, PhD

Full Professor (permanent) Velimir Sušić, PhD

Associate Professor Maja Maurić Maljković, PhD

Associate Professor Sven Menčik, PhD

Associate teachers: postdoctoral assistant Ivan Vlahek, PhD and teaching assistant Aneta Piplica

First day of classes: 27/02/2023 Last day of classes: 05/06/2023

Timetable for <u>LECTURES</u> academic year 2022/2023

Date	Methodological unit	Teacher	Location / Time	Literature
27/02/2023 1 st lecture	Introduction to domestication of animals. Introduction to breeding of most important animal species for production, companion and laboratory animals.	Associate Professor Sven Menčik, PhD	Lecture Room Physics and Biophysics 2pm-4pm	Literature list (selected chapters from the books, textbooks and other publications)
28/02/2023 2 nd lecture	The role of breed in livestock production. General and specific biological characteristics of animals.	Associate Professor Maja Maurić Maljković, PhD	Lecture Room Physics and Biophysics 8am-10am	Literature list (selected chapters from the books, textbooks and other publications)
07/03/2023		Full Drofessor (normanan		
3 rd lecture	Breeds of pigs and poultry.	Full Professor (permanent Anamaria Ekert Kabalin, PhD	Lecture Room Physiology 2pm – 4pm	Literature list (selected chapters from the books, textbooks and other publications)
10/03/2023			Lastura Danza Blaucias and	Literature P. A.
4 th lecture	Breeds of sheep and goats	Full Professor (permanent Velimir Sušić, PhD	Lecture Room Physics and Biophysics 10am -12pm	Literature list (selected chapters from the books, textbooks and other publications)
14/03/2023			Lastura Danua Dhunina and	Lite and the Peri
5 th lecture	Breeds of cattle and horses.	Associate Professor Sven Menčik, PhD	Lecture Room Physics and Biophysics 2pm – 4pm	Literature list (selected chapters from the books, textbooks and other publications)
15/03/2023		Full Professor (permanent)	Lecture Room Physics and	Literature list
6 th lecture	Breeds of dogs and cats.	Anamaria Ekert Kabalin, PhD	Biophysics 12.30pm – 2pm	(selected chapters from the books, textbooks and other publications)
16/03/2022	e-learning Most important species of	Associate Professor Maja	e-learning Lecture Room Physics and	Literature list (selected chapters from the books, textbooks
7 th lecture	laboratory animals. Rabbits, fur animals, cage pets	Maurić Maljković, PhD	Biophysics 2pm – 4pm	and other publications)

Timetable for <u>SEMINARS</u> academic year 2022/2023

MINARS					1.00
Date	Methodological	Teacher	Group	Location / time	Literature
24/03/2023 1st seminar	Breeds and hybrids of pigs and poultry in the world	Associate Professor Sven Menčik, PhD	1, 2, 3	Lectrure Room Physics and Biophysics 8am -10am	Literature list Presentations of data from on-line basis available via on-line LMS-VEF platform
14/04/2023	Breeds of cattle in the world	Associate Professor Maja Maurić Maljković, PhD	1, 2, 3	Lectrure Room Physics and Biophysics 10am -12pm	Literature list Presentations of data from on-line basis available via on-line LMS-VEF platform
2 nd seminar 18/04/2023	Breeds of horses in the world	Associate Professor Maja Maurić Maljković, PhD	1, 2, 3	Lecture Room Physics and Biophysics 10am -12pm	Literature list Presentations of data from on-line basis available via on-line LMS-VEI platform
3 rd seminar 20/04/2023	Breeds of sheep and goat in the world	Full Professor (permanent) Velimir Sušić, PhD	1, 2, 3	Lecture Room Physics and Biophysics 10am -12pm	Literature list Presentations of data from on-lin basis available via on-line LMS-VE
4 th seminar 22/05/2023 5 th seminar	e-learning Breeds of dogs in the	Full Professor (permanent) Anamaria Ekert Kabalin, PhD	1, 2, 3	e-learning or Lecture Room Physics and Biophysics 2pm – 4pm	Literature list Presentations of data from on-lin basis available via on-line LMS-VE platform

Timetable for PRACTICALS academic year 2022/2023

Date	Methodological unit	Teacher	Type of practical (Article 31, of Regulation)	Group	Location / time	Literature
02/03/2022 1st practical	Description of animals (marking and registration of animals)	postdoctoral assistant Ivan Vlahek, PhD teaching assistant Aneta Piplica	exercises in practicum	1, 2	Animal Breeding and Livestock Production Small and large computer hall 8am -10am	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform
03/03/2023 1st practical	Description of animals (marking and registration of animals)	Associate Professor Sven Menčik, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 12pm -2pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform
06/03/2023 2 nd practical	Description of animals (age-sex categories of animals Introduction to age evaluation of animals)	Associate Professor Sven Menčik, PhD postdoctoral assistant Ivan Vlahek, PhD	exercises in practicum	1, 2	Animal Breeding and Livestock Production Small and Large computer hall 12pm – 2pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform
06/03/2023 2 nd practical	Description of animals (age-sex categories of animals. Introduction to age evaluation of animals)	Full Professor (permanent) Anamaria Ekert Kabalin, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 2.30pm – 4pm	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform
08/03/2023 3 rd practical	Description of animals (assessment of exterior: colours and signs of horses, identification of horse)	Associate Professor Maja Maurić Maljković, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 12pm – 2pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform

09/03/2023 3 rd practical	Description of animals (assessment of exterior: colours and signs of horses, identification of horse)	Full Professor (permanent) Anamaria Ekert Kabalin, PhD postdoctoral assistant Ivan Vlahek, PhD	exercises in practicum	1, 2	Animal Breeding and Livestock Production Small and Large computer hall 8am -10am	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform
20/03/2023 4 th practical	Description of animals: Assessment of exterior: body measures, scoring systems	Associate Professor Maja Maurić Maljković, PhD	exercises in practicum	1	Animal Breeding and Livestock Production Small computer hall 10am -12pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform
20/03/2023 4 th practical	Description of animals: Assessment of exterior: body measures, scoring systems	teaching assistant Aneta Piplica	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 12.30pm -2.30pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform
22/03/2023 4 th practical	Description of animals: Assessment of exterior: body measures, scoring systems	teaching assistant Aneta Piplica	exercises in practicum	2	Animal Breeding and Livestock Production Small computer hall 2.00pm – 4pm	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform
27/03/2023 5 th practical	Colloquium 1	Associate Professor Maja Maurić Maljković, PhD Associate Professor Sven Menčik, PhD	exercises in practicum	1, 2	Animal Breeding and Livestock Production Small and Large computer hall 12pm -1.30pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform (methodological unit Lectures no. 1 and 2, as well as practicals 1, 2, 3 and 4)
27/03/2023 5 th practical	Colloquium 1	Full Professor (permanent) Anamaria Ekert Kabalin, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 2.30pm – 4pm	Prepared written materials of lectures and practicals available via on-line LMS VEF platform (methodological unit Lectures no.1 and 2, and practicals 1, 2, 3, and 4)

Course:

28/03/2023 6 th practical	Types and breeds and hybrids of pigs and poultry. Identification and description of specific characteristics of breeds and hybrid lines.	Associate Professor Sven Menčik, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 10am -12pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform
29/03/2023 6 th practical	Types and breeds and hybrids of pigs and poultry. Identification and description of specific characteristics of breeds and hybrid lines.	Full Professor (permanent) Anamaria Ekert Kabalin, PhD Associate Professor Sven Menčik, PhD	exercises in practicum	1, 2	Animal Breeding and Livestock Production Large and small computer hall 2pm – 4pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform
30/03/2023 7 th practical	Types and breeds of cattle. Identification and description of specific characteristics of the breeds	Associate Professor Maja Maurić Maljković, PhD teaching assistant Aneta Piplica	exercises in practicum	1, 2	Animal Breeding and Livestock Production Small and large computer hall 9am -11am	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform
31/3/2023 7 th practical	Types and breeds of cattle. Identification and description of specific characteristics of the breeds	teaching assistant Aneta Piplica	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 2pm – 4pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform
12/04/2023 8 th practical	Types and breeds of horses. Identification and description of specific characteristics of the breeds.	Full Professor (permanent) Anamaria Ekert Kabalin, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 10am -12pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform

13/04/2023 8 th practical	Types and breeds of horses. Identification and description of specific characteristics of the breeds.	Associate Professor Maja Maurić Maljković, PhD postdoctoral assistant Ivan Vlahek, PhD	exercises in practicum	1, 2	Animal Breeding and Livestock Production Small and Large computer hall 12pm – 2pm	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform
20/04/2023 9 th practical	Types and breeds of sheep and goats. Identification and description of specific characteristics of the breeds	postdoctoral assistant Ivan Vlahek, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 12pm – 2pm	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform
21/04/2023 9 th practical	Types and breeds of sheep and goats. Identification and description of specific characteristics of the breeds	Full Professor (permanent) Velimir Sušić, PhD teaching assistant Aneta Piplica	exercises in practicum	1, 2	Animal Breeding and Livestock Production Small and large computer hall 12,30pm - 2.30pm	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform
25/04/2023 10 th practical	Colloquium 2	Associate Professor Sven Menčik, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 8am -10am	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform (methodological unit: lecture no. 3, 4 and 5, as well as practicals no. 6, 7, 8 and 9)
26/04/2023 10 th practical	Colloquium 2	Full Professor (permanent) Anamaria Ekert Kabalin, PhD Associate Professor Sven Menčik, PhD	exercises in practicum	1, 2	Animal Breeding and Livestock Production Small and Large computer hall 10am – 12pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform (methodological unit: lecture no. 3, 4 and 5, as well as practicals no. 6, 7, 8 and 9)

27/04/2023 11 th practical	Systematic of breed groups and breeds of dogs. (1)	Full Professor (permanent) Anamaria Ekert Kabalin, PhD Associate Professor Maja Maurić Maljković, PhD	exercises in practicum	1, 2	Animal Breeding and Livestock Production Large and small computer hall 10am -12pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform
27/04/2023 11 th practical	Systematic of breed groups and breeds of dogs. (1)	Full Professor (permanent) Anamaria Ekert Kabalin, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 3pm -4.30pm	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform
02/05/2023 12 th practical	Systematic of breed groups and breeds of dogs. (2) Systematics of breed groups and breeds of cats.	postdoctoral assistant Ivan Vlahek, PhD teaching assistant Aneta Piplica	exercises in practicum	1, 2	Animal Breeding and Livestock Production Small and Large computer hall 8am -10am	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform
04/05/2023 12 th practical	Systematic of breed groups and breeds of dogs. (2) Systematics of breed groups and breeds of cats.	Full Professor (permanent) Anamaria Ekert Kabalin, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 12pm -2pm	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform
8/05/2023 13 th practical	Species of laboratory animals and cage pets	Associate Professor Maja Maurić Maljković, PhD teaching assistant Aneta Piplica	exercises in practicum	1, 2	Animal Breeding and Livestock Production Small and Large computer hall 4pm -5:30pm	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform
10/05/2023 13 th practical	Species of laboratory animals and cage pets	Associate Professor Maja Maurić Maljković, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Large computer hall 2pm -4pm	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform
16/05/2023 14 th practical	The importance of autochthonous breeds in livestock production and biodiversity. elearning (on-line), Repetition of	Associate Professor Sven Menčik, PhD	e-learning	3	Animal Breeding and Livestock Production Small computer hall 8am -10am	Prepared written materials of lectures and practicals available via on-line LMS- VEF platform

	practicals no. 11-13.					
17/05/2023 14 th practical	The importance of autochthonous breeds in livestock production and biodiversity. e-learning (on-line). Repetition of practicals no. 11-13.	Full Professor (permanent) Anamaria Ekert Kabalin, PhD Associate Professor Sven Menčik, PhD	e-learning	1, 2	Animal Breeding and Livestock Production Large and small computer hall 2pm – 4pm	Prepared written materials of lectures and practicals available via on-line LMS-VEF platform
01/06/2023 15 th practical	Colloquium 3.	Associate Professor Sven Menčik, PhD	exercises in practicum	3	Animal Breeding and Livestock Production Small computer hall 8am -10am	Prepared written materials of lectures and practicals Prepared written materials of lectures and practicals available via on-line LMS-VEF platform (methodological unit lecture no. 6 and 7 as wel as practicals no. 11, 12, 13 and 14)
01/06/2023 15 th practical	Colloquium 3.	Full Professor (permanent) Anamaria Ekert Kabalin, PhD Associate Professor Sven Menčik, PhD	exercises in practicum	1, 2	Animal Breeding and Livestock Production Small and large computer hall 11am - 1pm	Prepared written materials of lectures and practicals Prepared written materials of lectures and practicals available via on-line LMS VEF platforn (methodological unit lecture no. 6 and 7 as we as practicals no. 11, 12, 13 and 14)
05/06/2023 Field course	Farm visit with multipurpose animal breeds	Associate Professor Maja Maurić Maljković, PhD postdoctoral assistant Ivan Vlahek, PhD teaching assistant Aneta Piplica	field exercises	1, 2, 3	Family farm Džakula 10am – 4pm	Prepared written materials of lectures and practicals available via on-line LMS VEF platform

STUDENT OBLIGATIONS

Lecture attendance	Attending lectures (1st to 6lh) and e – learning (7th): a total of 6 points (the lowest number of points that a student should gain from this element is 3 points)
Seminars attendance	Attending seminars: a total of 6 points (the lowest number of points that a student should gain from this element is 4.8 points). During the seminar, students must do planned seminar thematic unit exercises. Each successful seminar unit brings 0,25 points. During the first to fourth (1 ^{st -} 4 th) and fifth (5 ^{th -} e-learning) seminar (e-learning), students will again self-check their knowledge based on 12 LMS system questions, at the end of each lesson, according to the thematic units. If successful, each self-check with more than 50% correct answers brings 0,75 points. Students will have a chance to be active participants during every seminar and earn 0,5 points by answering questions orally.
Practicals attendance	Attending practicals: a total of 6 points - the lowest number of points that a student should gain from this element is 4.8 points. During shift classes students must do 12 planned exercises. If successful, each exercise brings 0,25 points. During the 2 nd to 4 th , 6 th to 9 th and 11 th to 14 th (e-learning) practicals, students will, at the end of each lesson, self-check their knowledge based on 6 questions in LMS system, according to the thematic unit of the practical. Each successful self-check, with more than 50% of correct answers, brings you 0,5 points in activity. Students will have a chance to be active participants during every practical and earn 0,5 points by answering questions orally.
Active participation in seminars and practicals	Students who did not participate in practicals or seminars do not have the right to do a practicals and seminar self-checks. They only have the right to compensate the missed seminar and practicals date. During the term students need to achieve a minimum of 5 points (different combinations in solving programme exercises, self-checks, oral results interpretations / oral exams). The maximum number of points for this grading element is 10.
Final exam	Written: a total of 40 points (the lowest number of points that a student should gain from this element is 24 points)
Examination requirements	Student requirements are defined in the Regulations on the Integrated Undergraduate and Graduate Study of Veterinary Medicine (2022). Given the above, the student must acquire a minimum number of points from all assessment elements in order to take the final exam. Article 41: a student can justifiably be absent from up to 50 % of the lectures; 20% of the seminars and 20 % of the exercises.

GRADING AND EVALUATING STUDENT WORK

Continuous knowledge-checking (mid-terms)	During the course 3 colloquia will be organised. The first has a total of 12 points and a student should gain at least 58% (7 points), while the other two have 10 points and a student should gain at least 65% (6.5 points). A total of 32 points is possible in this category. The minimum number of credits that a student should gain from this element is 20 points. Regular colloquia dates: 1st colloquia – 27/03/2023 2nd colloquia – 25/04/2023 and 26/04/2023 3rd colloquia – 01/06/2023 Compensations: 14/06/2023 and 16/06/2023 20/06/2023
	04/07/2023

23	
	ourse:
•	Curaca

Final exams (dates)	Final exam schedule for summer session 2022/2023:
	21 st of June 2023
	3 rd of July 2023
	12 th of July 2023
	5 th of September 2023
	19 th of September 2023
Form of final exam	written

LITERATURE

Obligatory literature	Mason, I. L.: World dictionary of livestock breeds, types and varieties. 5th Edition. CABI Publishing, 2002. Fogle, B.: The new encyclopedia of the dog. Dorling Kindersley Publishing, Inc., 2000. Helgren, A.J.: Encyclopedia of cat breeds. Barrons Educational Series, Inc., 2013. Ward, J.D.: A Manual for laboratory animal management. World Scientific Publishing, 2008
Optional literature	On-line basis with data about breeds of animals

OBJECTIVES AND LEARNING OUTCOMES

Course objectives	The course topics provide the student with knowledge about general animal breed characteristics and animal breeds which are a reflection of genetically specific quality in animals of certain species. Students will be able to evaluate particular animal breed which is important for proper use of animals in different production systems.
Learning outcomes	After successfully finishing the course, student will be able to: explain the morphological, physiological and psychological changes of animals after domestication and selection directed to certain characteristics as well as animal breed characteristics (general and special) identify the species, breed, category and / or production type of domestic animals (cattle, horses, pigs, sheep, goats, donkeys, poultry, dogs, cats and the most important breeds of rabbits, laboratory animals and cage pets) describe the exterior of certain domestic animals evaluate production type or breeding group based on individual phenotypic characteristics use the gained knowledge in judging the exterior, condition, constitution, temperament and age as well as measuring and marking of animals identify basic administrative books, forms and computer programs used in the registration of domestic animals

GRADING SCHEME

Grade	
1 (F)	
2 (D,E)	
3 (C)	
4 (B)	
5 (A)	

Course leader

Associate professor Sven Menčik, PhD

Head of organizational unit:
Full professor Anamaria Ekert Kabalin, PhD

Note: The course leader is required to submit a Course Syllabus to all teachers and associates pertaining to the Cours