

**PROGRAM FOR UNDERGRADUATE
DOCTOR OF VETERINARY MEDICINE**

**COURSE SPECIFICATION
TY03054: VETERINARY PARASITOLOGY II**

I. General information

- Term: 8
- Credits: **Total credits: 2 (Lecture: 1.5 – Practice: 0.5 - Self-study: 6)**
 - Credit hours for teaching and learning activities:
 - + Lecture: 22 hrs
 - + Practice in lab/green house: 8 hrs
- Self-study: 90 hrs.
- Department conducting the course:
 - Department: Veterinary Parasitology
 - Faculty of Veterinary Medicine
- The course belongs to the following course block:

Foundation ☐		Fundamental ☐		Specialized ☒	
Compulsory ☐	Elective ☐	Compulsory ☐	Elective ☐	Compulsory ☐	Elective ☐

- Prerequisite course(s): Veterinary Parasitology 1 (TY03011)
- Course language: English ☐ Vietnamese ☒

II. Program learning outcomes

Program learning outcomes and program's performance criteria to which the course contributes:

Program learning outcomes After successfully completing this program, students are able to	Program Learning outcome's performance criteria
Expertise knowledge	
PLO2: Apply veterinary parasitology knowledge to the prevention and control of animal parasitic diseases effectively.	2.3: Implement animal disease prevention and control programs
PLO4: Design programs for diagnosis and treatment of disease for domestic animals, procedures for disease prevention and control for animals according to prescribed standards.	4.1: Design programs for diagnosis and treatment of disease for domestic animals according to prescribed standards.

Program learning outcomes After successfully completing this program, students are able to	Program Learning outcome's performance criteria
Advanced skill	
PLO8: Implement proficiently clinical and non-clinical skills, technical procedures in disease diagnosis and treatment for domestic animals, and animal disease prevention and control to contribute to the protection of public health	8.2: Implement proficiently clinical and non-clinical skills, technical procedures in animal disease prevention and control to contribute to the protection of public health
PLO10: Use proficiently information technology and modern equipment of the veterinary industry to serve animal disease diagnosis, treatment, prevention and management to achieve the set goals	10.2: Use modern veterinary equipment for animal disease diagnosis, treatment, prevention and management to achieve the set goals
PLO11: Precisely design scientific experiments in the diagnosis and treatment of parasitic diseases	11.4: Conduct research to successfully solve veterinary issues
Autonomy and responsibility	
PLO13: Demonstrate responsibility to protect the environment, improve human health through veterinary work	13.1: Demonstrate responsibility to protect the environment, improve human health through veterinary work

III. Course objectives and Program learning outcomes

* Course objectives:

- Knowledge: Course provided for students with knowledge in parasitic diseases in domestic animals.
- Skills: Course provide students with skills in diagnose, treat parasitic diseases in animals.
- Attitude: Course provide students with attitudes in Veterinary parasitology course. This is an important compulsory course related to productivity and quality of animal products, and protecting human health.

* Course expected learning outcomes

This course contributes to program expected learning outcomes as follows:

I – Introduction (Introduction); P – Implementation (Practice); R – Reinforce (Reinforce); M – Achieve (Master)

Code	Course name	Program learning outcome's performance criteria					
		2.3	4.1	8.2	10.2	11.4	13.1
TY03054	VETERINARY PARASITOLOGY II	R	R	M	M	M	R

	Course expected learning outcomes After successfully completing this course, students are able to	Program learning outcome's performance criteria
Knowledge		
K1	Apply veterinary parasitology knowledge to the prevention and control of animal parasitic diseases effectively	2.3: Implement animal disease prevention and control programs
K2	Design diagnostic program and develop treatment therapy for parasitic disease in livestock animals according to prescribed standards.	4.1: Design programs for diagnosis and treatment of disease for domestic animals according to prescribed standards.
Skill		
K3	Implement proficiently clinical and non-clinical skills, technical procedures in disease diagnosis and treatment for domestic animals, and animal parasitic disease prevention and control to contribute to the protection of public health	8.2: Implement proficiently clinical and non-clinical skills, technical procedures in animal disease prevention and control to contribute to the protection of public health
K4	Use proficiently information technology and modern equipment of the veterinary industry to serve animal parasitic disease diagnosis, treatment, prevention and management to achieve the set goals	10.2: Use modern veterinary equipment for animal disease diagnosis, treatment, prevention and management to achieve the set goals.
K5	Precisely design scientific experiments in the diagnosis and treatment of parasitic diseases	11.4: Conduct research to successfully solve veterinary issues
Autonomy and responsibility		
K6	Demonstrate responsibility to protect the environment, improve human health through veterinary work	13.1: Demonstrate responsibility to protect the environment, improve human health through veterinary work

IV. Course description

Code: TY03011- Name: Veterinary Parasitology 2 (Total credits 2: lecture 1,5- practice 0,5- self-study 6)

Brief description of the course: Veterinary Parasitology II helps students master basic knowledge about disease, morphology, life cycle, epidemiology, pathogenesis, symptoms and lesions, thereby proposing diagnostic methods and preventive measures for some diseases. The parasite mainly parasitizes cattle, pigs and poultry. Basic principles and knowledge of parasitic zoonotic diseases.

Teaching method: students listen to lectures and practice in class. Students do the exercises under the guidance of the teacher.

Assessment method: Attendance: 10%, midterm: 30%, final exam: 60%.

Prerequisites course: Veterinary Parasitology I

V. Teaching and learning methods

1. Teaching Methods

Lecturers use the means of communication (writing board, lights, sound system, ...) to present the content of the lecture. Students receive lectures on the basis of individual work.

Table 1: Matrix of Teaching methods and CLOs

CLOs Teaching methods	K1	K2	K3	K4	K5	K6
Lecturing	X	X				X
Essay	X	X				X
Practice			X	X	X	

2. Learning Methods

Active learning method, in which students read material about the subject matter in advance. In the classroom, students listen to the lecturer's lecture and at the same time exchange and discuss between students and with the lecturer. Students participate in project implementation, final report and project presentation.

VI. Student tasks

- Attendance: All students participating in this module must attend at least 80% of the number of theoretical lessons and 100% of the number of practical lessons.
- Prepare for the lecture: All students attending this module must read the teacher's lecture and textbook before learning a new lesson.
- Practice: All students participating in this module must fully participate in practical lessons and participate in the implementation of practical content.
- Midterm exam: all students are required to take the midterm exam.
- Final exam: all students must take the final exam

VII. Assessment methods

1. Grading: 10

2. Average score of course is the total points of rubrics multiplied by the respective weight of each rubric.

3. Assessment summary

Table 2. Matrix of Assessment methods and CLOs

KQHTMĐ	K1	K2	K3	K4	K5	K6	Thời gian/tuần học
Đánh giá quá trình (40%)							
Rubric 1. Class attendance (10%)	x	x	x	x	x	x	Week 1 - 8
Rubric 2. Mid-term test (30%)	x	x	x				Week 4
Rubric 3. Practice (unweighted)			x	x	x		
Đánh giá cuối kì (60%)							
Rubric 5. Final exam (60%)	x	x	x	x	x		According to the exam schedule published

							by the VNUA
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4. Course requirements and policies

- *Participating in practice:* If students do not participate in enough practical content, they will not be able to participate in the final exam.
- *Taking exams:* Students must complete writing essay (as midterm exam). Students who do not submit writing essay will not be able to take the final exam.
- *Ethical requirements:* Students must abide by the rules of the subject.

VIII. Textbooks and references

* *Text Books/Lecture Notes:*

1. Nguyen Van Tho, Nguyen Thi Hong Chien, Duong Duc Hieu, Bui Khanh Linh, Nguyen Thi Nhen, Nguyen Van Phuong, Nguyen Thi Hoang Yen, (2019). Textbook of veterinary parasites, University of Agriculture Publishing House.
2. Bui Khanh Linh, Nguyen Van Tho, Nguyen Thi Hoang Yen, Nguyen Van Phuong, Nguyen Thi Hong Chien, Duong Duc Hieu, Nguyen Thi Nhen, Tran Hai Thanh, (2021). Textbook of veterinary parasitology practice. University of Agriculture Publishing House.

* *Additional references:*

3. Pham Sy Lang, Nguyen Huu Hung, Nguyen Van Dien, Nguyen Ba Hien, Bach Quoc Thang, Ha Thuy Hanh (2015). Parasitic diseases in cattle and poultry in Vietnam. Agricultural publisher.
4. Pham Sy Lang, Hoang Van Nam et al (2012). The disease is transmitted from animals to humans. Agricultural publisher.

* *Studies, research results*

IX. Course outline

Week	Content	Course expected learning outcomes
1,2,3	Chapter 1: Major trematoda and cestoda Diseases in domestic animals	
	A/The main content: (8,5 hours) Theory: 1.1. Paramphistomatidosis animalium ruminatorum 1.2. Eurytremosis animalium ruminatorum 1.3. Monieziosis animalium ruminatorum 1.4. Tapeworms parasitic in carnivores 1.5. Cysticercosis animalium 1.6. Echinococcosis animalium 1.7. Coenurosis animalium Practice/Experiment:(2.5 hours) 1.8 Some morphological characteristics, development life cycle and drugs for prevention and treatment of parasitic trematoda and cestoda	K1- K6
	B/ Self- study contents: (17 hours) Major trematoda and cestoda Diseases in domestic animals	

Week	Content	Course expected learning outcomes
4,5,6	Chapter 2: Major nematoda Diseases in domestic animals	K1-K6
	A/ Main contents: (8 hours) Theory: 2.1.Toxocariosis canis et felis 2.2.Parascariosis equi 2.3.Dictyocaulosis animalium ruminatorum 2.4.Metastrongylosis suum 2.5.Trichostrongylidosis animalium ruminatorum 2.6.Trichocephalus suis 2.7.Stephanurosis suum 2.8.Stomachosis suum 2.9.Oesophagostomosis suum 2.10.Heterakiosis gallinarum 2.11.Ancylostomatidosis canis et felis 2.12. Dirofilaria immitis Practice/Experiment:(3 hours) 2.12. Some morphological characteristics, development life cycle and drugs for prevention and treatment of parasitic <i>Ascaridia</i>	
	B/ Self- study contents: (22hours) 2.13. Major nematoda Diseases in domestic animals	
	Chapter 3: Major Artropoda and Unicellular	K1-K6
7,8,9	A/ Main contents: (8,5 hours) Theory: 3.1. Ixodoidea bovis and transmission sick 3.2. Ixodoidea canis and transmission sick 3.3. Demodex animalium 3.4. Tabanus, Stomoxyst and transmission sick 3.5. Trypanosoma animalium 3.6. Trichomonosis bovis 3.7. Anaplasma bovis 3.8. blood sugar parasitic disease bovis 3.9. Histomonosis galinarum	
	Practice/Experiment: (2,5 hours) 3.10. Some morphological characteristics, development life cycle and drugs for prevention and treatment of parasitic Artropoda and Unicellular B/ Self- study contents: (17hours) 3.11. Major Artropoda and Unicellular	
	Chapter 4: The disease is transmitted from animals to humans	K1-K6
10,11,12	A/ Main contents: (5 hours) Theory: (5hours) 4.1. Clonorchiasis animalium and human 4.2. Trichinella spiralis animalium and human 4.3. Pulmonary distomiasis animalium and human 4.4. Nosemosis animalium and human	
	B/ Self- stusy contents: (10hours) Diagnostic methods for parasitic helminths	

X. Facility and other requirements:

- Classroom, practice: computer, projector, board, tools, medicine for practice
- E-learning

Hanoi, 15 of June 2022

HEAD OF DEPARTMENT

(Sign and write full name)

(signed)

Bui Khanh Linh

DEAN OF FACULTY

(Sign and write full name)

(signed)

LECTURER

(Sign and write full name)

(signed)

Nguyen Thi Hong Chien

VICE PRESIDENT

(Sign and write full name)

(signed)

APPENDIX

LIST OF LECTURERS AND ASSISTANTS FOR THE COURSE