

## TY03051: Animal infectious diseases 1

### 1. General information

- Term: 07
- Credits: **Total credits: 02 (Lecture: 1.5 – Practice: 0.5) - Self-study: 06**
- Credit hours for teaching and learning activities:
  - + Lecture and Exercises on class: 21 hrs
  - + Presentation and Discussion: 1.5 hrs
  - + Practice in lab/green house: 7.5 hrs
- Self-study: 90 hrs.
- Department conducting the course:
  - Department: Veterinary Microbiology and Infectious Diseases
  - Faculty: Veterinary Medicine
- Kind of the course:

Foundation <input type="checkbox"/>		Fundamental <input type="checkbox"/>		Veterinary Medicine <input type="checkbox"/>	
Compulsory	Elective	Compulsory	Elective	Compulsory	Elective
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- Prerequisite course(s): TY02019 – Veterinary Microbiology

### 2. Course objectives and expected learning outcomes

#### \* *Course objectives:*

- Knowledge: Course provided for students with knowledge about the generation and spread of infectious diseases in livestock and poultry; characteristics of a number of infectious diseases commonly occurring in livestock and poultry and methods of diagnosis, prevention and treatment of infectious diseases.
- Skills: Course provide students with skills in diagnosing infectious diseases based on epidemiological characteristics, symptoms, specific lesions of the disease and methods of laboratory diagnosis, prevention and treatment of common infectious diseases. in domestic animals in Vietnam.
- Attitude: The course forms for learners a positive attitude, responsible for protecting the environment, protecting public health and respecting animal welfare.

#### \* *Course expected learning outcomes*

Notation	Course expected learning outcomes (CLOs) After successfully completing this course, students are able to	Program performance criteria (PPC)
<b>Knowledge</b>		
CLO1	Applying knowledge of veterinary infectious diseases 1 to the implementation of animal disease prevention programs.	2.3
CLO2	Apply knowledge of veterinary infectious diseases 1 to the evaluation of diagnostic and treatment efficacy	3.3

CLO3	Design programs for diagnosis and treatment of infectious diseases for livestock according to prescribed standards.	4.1
<b>Skills</b>		
CLO4	Consulting on veterinary infectious disease prevention techniques oriented to bring economic benefits	9.1
CLO5	Apply research results on veterinary infectious diseases to successfully solve problems in the veterinary field.	11.4
<b>Attitude</b>		
CLO6	Implement responsibility to protect the environment, improve human health through the prevention of veterinary infectious diseases	13.1

### 3. Course description

Brief description of the course: This course consist of Prevention of infectious diseases; infectious diseases of ruminants; infectious diseases of pigs and infectious diseases of poultry. Practice diagnosis of some common infectious diseases in domestic animal. Teaching method: Students listen to lectures in class in combination with self-study, self-referencing documents and exchanging with classmates and teachers. Students practice, do group exercises under the guidance of teachers. Assessment method: Assessment of learning attitude 10%; Mid-term examination: 30%; Final exam: 60%. Prerequisite course: Veterinary microbiology – TY02019.

### 4. Teaching and learning & assessment methods

CLOs	CLO1	CLO2	CLO3	CLO4	CLO5	CLO6
<b>Teaching methods</b>						
Lecturing	x	x	x			
Group excersises	x	x	x	x	x	
Practise		x		x	x	X
<b>Assessment</b>						
Rubric 1. Participation attitude (10%)				x	x	x
Rubric 2. Mid-term exam by group exercises assessment (30%)	x	x	x	x	x	
Rubric 3. Practise (0%)		x		x	x	x
Rubric 4. Final exam (60%)	x	x	x	x	x	

### 5. Student tasks

- Attendance: All students must not be absent more than 30% of the prescribed period.
- Assignment: All students must have full curriculum / lectures of the module and prepare all assignments required by the lecturer
- Mid-term exam: All students take the midterm exam to be eligible for the final exam
- Practise: All students take the practice assessment to be eligible for the final exam
- Final exam: All students take the final exam to get total results.

## 6. Text books and references

### \* *Text Books/Lecture Notes:*

- Nguyễn Bá Hiên, Huỳnh Thị Mỹ Lệ, Lê Văn Lãnh, Đỗ Ngọc Thúy, Nguyễn Văn Giáp, Đặng Hữu Anh, Trương Hà Thái, Chu Thị Thanh Hương (2020). Animal infectious diseases. Print Vietnam National University of Agriculture.

### \* *Additional references:*

- OIE Terrestrial Manual Online Access (2022). <https://www.woah.org/en/what-we-do/standards/codes-and-manuals/terrestrial-manual-online-access/>

- Huỳnh Thị Mỹ Lệ, Đặng Hữu Anh, Nguyễn Văn Giáp, Mai Thị Ngân, Trương Hà Thái (2021). Six new diseases caused by viruses in poultry have been discovered in Vietnam. Print Vietnam National University of Agriculture. ISBN: 978-604-924-643-2.

- Phạm Khắc Hiếu (2018). Molecular pharmacology applied in veterinary medicine (Volume 2). Print Vietnam National University of Agriculture.

### \* *Research results:*

- Lại Thị Lan Hương, Vũ Đức Hạnh, Trịnh Đình Thâu, Nguyễn Thị Lan, Nguyễn Thị Minh Phương, Nguyễn Tiến Đạt, Phạm Thị Bích Liên, Đinh Phương Nam, Nguyễn Thị Thu Hằng, Lê Văn Hùng, Phạm Hồng Ngân, Phạm Hồng Trang (2021). Assessment on the sanitation and disinfection situation at some household scale pig farms in African swine fever outbreak areas in some northern provinces, Viet Nam. Journal of Veterinary Science and Technology, Vol 28, No 7: 15-24.

- Cao Thị Bích Phượng, Nguyễn Văn Giáp, Nguyễn Thành Trung, Mai Thị Ngân, Vũ Thị Ngọc, Huỳnh Thị Mỹ Lệ (2022). Application of Direct PCR for Detection of Several Bacteria in Chicken with Respiratory Disease Complex in Hanoi and Neighbour Vicinity. Vietnamese Journal of Agriculture Sciences, Vol 20, No. 2: 156-165.

## 7. Course outline

Week	Content	Course expected learning outcomes
1	<b>Chapter 1: Prevention and control infectious diseases</b>	CLO1, CLO2, CLO3
	<b>A/ Main contents:</b> <b>Theories:</b> (2.5 hours) 1.1. Outbreak Processing 1.2. Prevention and control methods of infectious diseases <b>Discussion</b> (0.5 hours) 1.3. Principles of sampling, storage and transport of samples 1.4. Organize vaccination campaign for cattle and poultry	
	<b>B/Self-studying contents:</b> (9 hours) 1.5. Phenomenon of infection 1.6. Type of infectious diseases	
.....	<b>Chapter 2: Infectious diseases in ruminant</b>	CLO1, CLO2, CLO3, CLO4, CLO5, CLO6
	<b>A/Main contents:</b> <b>Theories:</b> (4 hours) 2.1. Foot and mouth disease 2.2. Pasteurellosis in cattle	

Week	Content	Course expected learning outcomes
	<b>Practising contents:</b> (1.5 hours) Clinical diagnosis diseases in ruminant	
	<b>B/ Self-studying contents:</b> (16.5 hours) 2.3. Distinguish foot and mouth disease, pasteurellosis of cattle with some easily confused diseases based on epidemiology, symptoms and specific lesions; 2.4. Develop a treatment for cattle	
.....	<b>Chapter 3: Infectious diseases in swine</b>	CLO1, CLO2, CLO3, CLO4, CLO5, CLO6
	<b>A/ Main contents:</b> <b>Theories:</b> (7 hours) 3.1. Classical swine fever 3.2. Pasteurellosis 3.3. Salmonellosis 3.4. Erysipelas 3.5. Porcine Reproductive and Respiratory Syndrom <b>Practising contents:</b> (1.5 hours) 3.6. Clinical diagnosis of diseases of swine <b>Discussion:</b> (0.5 hours) 3.7. Usage of vaccines to prevent disease in pigs	
	<b>B/ Self-studying contents:</b> (27 hours) 3.8. Distinguish the red-diseases of pigs with some easily confused diseases based on epidemiology, symptoms and specific lesions; 3.9. Develop a treatment methods of swine diseases	
	<b>Chapter 4: Infectious diseases in poultry</b>	CLO1, CLO2, CLO3, CLO4, CLO5, CLO6
.....	<b>A/ Main contents:</b> <b>Theories:</b> (7.5 hours) 4.1. Newcastle disease 4.2. Gumboro 4.3. Avian Pasteurellosis 4.4. Salmonellosis 4.5. Duck virus enteritis 4.6. Avian Influenza <b>Practising contents:</b> (4.5 hours) 4.7. Clinical diagnosis of poultry diseases 4.8. Bacterial diagnosis of avian pasteurellosis <b>Discussion:</b> (0.5 hours) 4.9. Understand how to use vaccines to prevent disease in poultry	
	<b>B/ Self-studying contents:</b> (37,5 hours) 4.10. Distinguishing some easily confused diseases in poultry based on epidemiology, symptoms and typical lesions; 4.11. Develop a treatment method of poultry	.....