

Course (TY02002): **Animal Anatomy II**

1. General information

- Term: 4
- Credits: **Total credits 2 (Lecture: 1 – Practice: 1)**
- **Self-study: 6** credits
- Credit hours for teaching and learning activities: 30 hrs
- Self-study: 90 hrs.
- Department conducting the course:
 - Department: Anatomy and Histology
 - Faculty: Veterinary Medicine
- Kind of the course:

Foundation <input type="checkbox"/>		Fundamental <input type="checkbox"/>		Option 1 <input type="checkbox"/>		Option 2 <input type="checkbox"/>	
Compulsory	Elective	Compulsory	Elective	Compulsory	Elective	Compulsory	Elective
<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Prerequisite course(s): CN02001 Animal anatomy I

2. Course objectives and expected learning outcomes

* *Course objectives:*

- Knowledge: Course provided for students with knowledge in approach to the physical structure of the body. analyze the relationship of positions and functions between organs in each organ system; describe the morphology and general structure of animal body
- Skills: Course provide students with skills in understand the main functions of the organs of each organ system in the mammalian and avian body. Identify and compare the organs of the organ systems of some major domestic animals: Pigs, Cows, Dogs, Cats
- Attitude: The course provides students with attitudes in show love for animals, meticulous, careful and self-responsible

* *Course expected learning outcomes*

Notation	Course expected learning outcomes (CLOs) After successfully completing this course, students are able to	Program performance criteria (PPC)
Knowledge		
CLO1	Describe the anatomical features of each region of the body	3.1
CLO2	Describe and compare the anatomical characteristics of each body region on some domestic animals	3.2
CLO3	Describe the path of nerves and vessels in the animal body	5.4
Skills		
CLO4	Location can be determined; describe the morphology and relationship/relation on the position, morphology, and structure of organs in each body region.	8.1; 8.2
CLO5	Perform well the operation of dissection and dissection of organs in the animal's body	8.1; 8.2

Attitude		
CLO6	Show love for animals, meticulous, careful and self-responsible	13.2

3. Course description

Brief description of the course: This course consists of code TY02002 - Course name: Animal Anatomy I (Total credit 2: Lecture 1 – Practice 1 – self-study 6).

Content: The course includes knowledge about the body structure of cows; Buffalo; Pig; Horse; Dog; Cat; Poultry; introduction to the skeletal system, the muscular system, the nervous system and senses, the circulatory system, the lymphatic system, the endocrine system, the digestive system, the respiratory system, the urinary system, the genitourinary system; location and morphology, general structure, distribution of nerve vessels, functions of organs and relationships between organs in the body.

Teaching method: Students listen to lectures in class in combination with self-study, self-referencing documents and exchanging with friends and teachers. Students practice under the guidance of instructors.

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

4. Teaching and learning & assessment methods

CLOs	CLO1	CLO2	CLO3	CLO4	CLO5	CLO6
Teaching methods						
Lecturing	x		x	x	x	x
Teaching through practical work		x				
Assessment						
Rubric 1. Diligence (10%)	x	x	x	x	x	x
Rubric 2. Practical		x				
Rubric 3. Mid-term exam (30%)		x				
Rubric 4 Final exam (60%)	x	x	x	x	x	x

5. Student tasks

- Attendance: All students must proactive, punctual, actively answering questions.
- Preparation for the lecture: All students must take part in the mid-term exam. Students who do not take the midterm exam will not be able to take the final exam.
- Assignment: All students must complete the assignment given by lecturer
- Mid-term exam: All students must take part in the mid-term exam. Students who do not take the midterm exam will not be able to take the final exam.
- Final exam: All students must take the final exam.

6. Text books and references

* *Text Books/Lecture Notes:*

- Quan, V.N., Nam, N. H., Long, S.T. and Khang, H. V. (2019). Giáo trình phẫu thuật ngoại khoa thú y. Nhà xuất bản học viện Nông nghiệp, 175 trang.

Van, T.P., Ty, D.T., Tu, V.P. (1992) Giáo trình Giải phẫu cục bộ gia súc. Nhà xuất bản Nông nghiệp

*** Additional references:**

- Thanh, P.N. (1965) Giải phẫu bò. Nhà xuất bản Nông nghiệp.
- Brandley, T.G. (1959) Topographical anatomy of the domestic animal.
- Robert, G., SAUDERS, W.B. (1975) The Anatomy of the domestic animal.

7. Course outline

Week	Content	Course expected learning outcomes
1	<i>Chapter 1: Anatomy of the head and neck area</i>	
	<i>A/ Main contents: (3 hours)</i> <i>1. Theories: (3 hours)</i> 1.1 Introduction to the sinuses, head and neck regions 1.2. Cranial sinuses 1.3. Eye socket area 1.4. Oral cavity. 1.5. Sinus 1.6. Neck area <i>2. Practice: (3 hours)</i> 2.1. Cranial sinuses 2.2. Eye socket area 2.3. Oral cavity. 2.4. Sinus 2.5. Neck area	CLO1, 2, 3, 4, 5, 6
	<i>B/ Self-study contents: (18 hours)</i> 1.1.All content learned in class	
...	<i>Chapter 2: Chest Anatomy</i>	
	<i>A/ Main contents: (3 hours)</i> <i>1. Theories: (3 hours)</i> <i>1.1 The bones of the chest region</i> <i>1.2. Chest muscles</i> <i>1.3. Chest cavity and organs in the thoracic cavity</i> <i>1.4. Distribution of thoracic vessels</i> <i>1.5. Chest lymph nodes</i> <i>1.6. Thoracic nerves</i> <i>2. Practice: (3 hours)</i> 2.1. Chest bones 2.2. Chest muscles 2.3. Organs in the thoracic cavity	CLO1, 2, 3, 4, 5, 6

	2.4. Veins, thoracic nerves	
	B/ Self-study contents: (18 hours) 1.1.All content learned in class	
	Chapter 3 Abdominal Anatomy	
	A/ Main contents: (3 hours) 1. Theories: (3 hours) 1.1 Abdominal bones 1.2. Abdominal muscles 1.3. Abdominal cavity and organs in the thoracic cavity 1.4. Abdominal vascular distribution 1.5. Abdominal lymph nodes 2. Practice: (3 hours) 2.1. Abdominal bones 2.2. Abdominal muscles 2.3. Organs in the abdominal cavity 2.4. Veins and nerves in the abdomen	CLO1, 2, 3, 4, 5, 6
	B/ Self-study contents: (18 hours) 1.1.All content learned in class	
	Chapter 4 . Pelvic and lower abdominal anatomy	
	A/ Main contents: (3 hours) 1. Theories: (3 hours) 1.1 Pelvic-hip bones 1.2. Pelvic-hip muscles 1.3. Pelvic cavity & organs in the pelvic cavity 1.4. Distribution of pelvic vessels 1.5. Pelvic lymph nodes 1.6. Pelvic nerve 1.7. Anatomy of the lower abdomen 2. Practice: (3 hours) 2.1. The bones of the pelvis 2.2. Organs in the pelvic cavity 2.3. Pelvic sinus muscles 2.4. Nerves, vessels in the pelvic region	CLO1, 2, 3, 4, 5, 6

	B/ Self-study contents: (18 hours) 1.1.All content learned in class	
	Chapter 5 . Anatomy of the limb region	
	A/ Main contents: (3 hours) 1. Theories: (3 hours) 1.1. Local anatomy of anterior limbs 1.1.1 Anterior limb bones and joints 1.1.2. Anterior limb muscles 1.1.2. Distribution of anterior limb vasculature 1.1.4. Anterior extremity nerve distribution 1.1.5. Anterior limb lymph nodes 1.2. Local anatomy of posterior limb 1.2.1 The bones and joints of the hind limbs 1.2.2. Posterior limb muscles 1.2.3. Distribution of posterior extremities vasculature 1.2.4. Distribution of posterior limb nerves 1.2.5. Posterior limb lymph nodes 2. Practice: (3 hours) 2.1. The bones of the fore and hind limbs 2.2. Nerve vessels of the anterior and posterior extremities 2.3.Joints in the front and rear limbs	CLO1, 2, 3, 4, 5, 6
	B/ Self-study contents: (18 hours) 1.1.All content learned in class	