COURSE SYLABUS (Code: CN03509) LIVESTOCK WASTE MANAGEMENT

1. General information

Course: Livestock waste management (CN03509)

Credits: 2 (Lecture: 1,5 – Practice: 0,5 – Self-study: 6,0)

Training program: Animal Science (Option 1: Animal production & Health, Option 2: Animal nutrition & Feed technology)

2. Expected learning outcomes (ELOs)

Notation	Course expected learning outcomes	Program expected learning	
	After successfully completing this course,	outcomes	
	students are able to		
Knowledge			
K1	Analyze the factors affecting the animal production and the animal waste volume, analyze the effects of animal waste on animal health and the evironment	ELO 2: Analyze factors affecting the animal breed production, nutrition, and animal health	
K2	Apply the knowledge on animal waste to design the efficient animal waste management program towards a cleaner production and mitigate the environemtal pollution	ELO 4: Design livestock production programs to ensure sustainable development	
Skills	1		
К3	Apply the systematic thinking, critical thinking and problem-solving skill to study and manage animal waste effectively	ELO 5: Apply effectively creative and critical thinking, and problem-solved skills to scientific research and professional practice	
K4	Apply the practice and technology of animal waste treatment to the model of livestock production with good hygine, safety and sustainability	ELO 9: Apply approprate techniques, technologies and systems in sustainable livestock production	
K5	Apply effectively the practice and technology to animal waste management	ELO 11: Perform properly the basic and intensive technical procedure in livestock production	
Attitute			
K6	Perform the habits of life-long learning	ELO 14: Perform the habits of life-long learning	

3. Brief descriptions

Introduction: General situation of animal waste production

Chapter 1: Management of solid waste

Chapter 2: Management of liquid waste

Chapter 3: Management of odour and gas waste

Chapter 4: Cleaner production in animal husbandry

4. Learning methods

- Students read the textbooks and references by themselves,
- Group discuss to design and conduct the research project on specific topics
- E-learning: Find and look up references; do the homework

5. Assessment methods

- Grading scale: 10

- Average point: is the sum of the rubric scores multiplied by the weight of each rubric

- + Class paticipation: 10%
- + Research project: 30%
- + Final examination: 60%

6. Student tasks

- Attendance: Students must attend at least 75% of the class and participate in class activities (discussion in class and on e-learning system, etc.)

- Conduct the research project: Students work in group to design, implement, field survey and write report on a specific topic.

- Complete the final examination.

7. Key academic staffs

Full name: Bui Huu Doan Office address: VNUA	Title: Assoc. Prof. Phone number: 0975229668
Email: <u>bhdoan@vnua.edu.vn</u>	Website: http://www.vnua.edu.vn/vie/
Full name: Vu Dinh Ton	Title: Prof.
Office address: VNUA	Phone number: 0913033177
Email: <u>vdton@vnua.edu.vn</u>	Website: http://www.vnua.edu.vn/vie/
Full name: Nguyen Xuan Trach	Title: Prof.
Office address: VNUA	Phone number: 0904148104
Email: <u>nxtrach@vnua.edu.vn</u>	Website: http://www.vnua.edu.vn/vie/
Full name: Han Quang Hanh	Title: Dr.
Office address: VNUA	Phone number: 0982041382
Email: <u>hqhanh@vnua.edu.vn</u>	Website: http://www.vnua.edu.vn/vie/

Communicate with key academic staffs: via email, phone and e-learning system.