COURSE SYLABUS (Code: CN02501)
ANIMAL GENETICS

1. General information

Course: Animal genetics (CN02501)

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 After successfully completing this course, students are able to	Program expected learning outcomes
Knowledge		
K1	Apply knowledge of physics and chemistry to animal genetics	ELO1: **Apply** the general knowledge of natural and social sciences and the understanding of contemporary issues to the field of livestock production
K2	Analyze genetic components affecting quality and production traits in breeding animals	ELO 2: **Analyze** factors affecting the animal breed production, nutrition, and animal health
K3	Evaluate effect of genetic improvement on breeding animals by using production and reproduction traits	ELO 3: **Evaluate** the efficiency of animal breed production, nutrition and animal health
Skills		
K4	Collaborate in a team to find out the most optimal DNA extraction procedure	ELO 6: **Coordinate** teamwork in professional activities to achieve objectives as a member or a manager
K5	Use laboratory equipment to identify favorable genotypes in animal breeding	ELO 10: **Utilize** information technology and modern equipment in livestock industry to serve production and business to achieve objectives
Ethics and attitudes		
K6	Compliance with internal regulations and laboratory safety	ELO 12: **Comply** with state law and specific regulations and professional ethics

3. Brief descriptions

Chapter 1: Basics of genetic materials

Chapter 2: Principle of molecular genetics

Chapter 3: Genetics of sex

Chapter 4: Immuno genetics

Chapter 5: Population genetics

Chapter 6: Quantitative genetics

4. Learning methods

- Students read the textbooks and references by themselves,

- Participate in class discussion

- Find references, discuss

- Practice

- E-learning: Find and look up references; do homework

5. Assessment methods

- Grading scale: 10

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

    + Class participation: 10%

    + Mid-term test: 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.)

- Practice: Students must attend all practice content

- Complete the mid-term test and the final examination.

7. Key academic staffs

Full name: Nguyen Hoang Thinh   Title: Dr.

Office address: VNUA   Phone number: 0968643535

Email: nhthinh@vnua.edu.vn   Website: http://www.vnua.edu.vn/vie/

Full name: Nguyen Chi Thanh   Title: Master

Office address: VNUA   Phone number: 0988844475

Email: ncthanh@vnua.edu.vn   Website: http://www.vnua.edu.vn/vie/

Full name: Chu Tuan Thinh   Title: Dr.

Office address: VNUA   Phone number: 02438768265

Email: ctthinh@vnua.edu.vn   Website: http://www.vnua.edu.vn/vie/

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