# COURSE SYLLABUS (Code: CN02701) EXPERIMENTAL DESIGN

### 1. General information

Course: Experimental design (CN02701)

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	outcomes
	course, students are able to	
Knowledg	ge	
K1	Applying knowledge of biological statistics to analyze the factors and draw conclusions about differences between livestock populations from experimental data	ELO1: <b>Apply</b> the general knowledge of natural and social sciences and the understanding of contemporary issues to the field of livestock production
Skills		
K2	Applying results from studies to provide appropriate solutions in livestock development	ELO 8: Use effectively the skills of surveying, collecting, and processing data to serve scientific research, technology development, and management of livestock production
K3	Choose and use the correct biological statistical methods to analyze data in the livestock field	ELO 9: <b>Apply</b> appropriate techniques, technologies, and systems in sustainable livestock production
K4	Proficient use of specialized software for data processing in the field of animal husbandry	ELO 10: <b>Utilize</b> information technology and modern equipment in the livestock industry to serve production and business to achieve objectives.
Attitute		
К5	Demonstrate responsibility and respect for animal welfare in the design of animal husbandry experiments	ELO 12: <b>Comply</b> with state laws and specific regulations and professional ethics

# 3. Brief descriptions

- Chapter 1: Descriptive statistics
- Chapter 2: Estimating and testing hypotheses

Chapter 3: Concepts of experimental design

- Chapter 4: One-factor experiments
- Chapter 5: Two-factor experiment

Chapter 6: Correlation and linear regression

Chapter 7: Correspondence table

# 4. Learning methods

- Students read the textbooks and references by themselves,
- Participate in-class discussion
- Find references, discuss
- Practice
- E-learning: Find and lookup 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: Do Duc Luc	Title: Assoc.Prof
Office address: VNUA	Phone number: 0912370193
Email: ddluc@vnua.edu.vn	Website: <u>http://www.vnua.edu.vn/vie/</u>
Full name: Ha Xuan Bo	Title: Dr.
Office address: VNUA	Phone number: 0936595883
Email: hxbo@vnua.edu.vn	Website: http://www.vnua.edu.vn/vie/

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