SH03052: BIOTECHNOLOGY IN ANIMAL BREEDING

Credits: 2 (Theory: 2 - Practise: 0 - Self-study: 6)

EXPECTED LEARNING OUTCOMES

Code	Course expected learning outcomes Upon completion of this course, students are able to:	ELOs of the program
Knowledge		
CELO1	**Analyze** the needs and requirements of stakeholders for biotechnology products for management, production and business. **Analyze** the following issues: ✓ Concepts and principles of animal selection-breeding; ✓ Traditional technology in animal breeding; ✓ Genetic engineering applied in animal breeding; ✓ Genetically modified animals.	ELO2
Skills		
CELO2	**Apply** critical and creative thinking to effectively solve research, technology transfer and production problems in the biotechnology industry.	ELO6
CELO3	**Apply** methods and skills to collect, analyze and process information in scientific research and investigate problems of professional practice.	ELO10
CELO4	**Advise** customers and partners on biotechnology products with a positive business perspective.	ELO12
CELO5	**Maintain** professional ethics, fulfill one's duty to improve the well-being of the society, and protect the environment.	ELO14
Attitude		
CELO6	**Make** a habit of updating knowledge and experience to improve your professional level.	ELO15

SUBJECT CONTENT

Chapter 1. Introduction

Chapter 2. Concepts and principles of animal breeding

Chapter 3. Traditional technologies in animal breeding

Chapter 4. Genetic engineering for animal breeding

Chapter 5. Techniques of genetic modification of animals

LEARNING METHODS

- Students prepare lessons before going to class according to the study plan that lecturers have disseminated.
- Students participate in learning activities in class: listening to lectures, answering questions, discussing as instructed by teachers.
- Online Learning.

MISSION OF STUDENTS

- Attendance classes (classes in lecture halls or online classes-MSTeams-Vnua): Students must attend classes fully according to the regulations of the University, participate in speaking ideas, discuss building lessons.

- Preparing for the lecture: Students attending this module are required to read the lecture and reference materials before studying the related content.

- 15-minute exercises and tests (if any): Students must complete 15-minute exercises and tests.

- Essay (if any): Students must prepare all essays, participate in the discussion and pass the exam satisfactorily.

- Must take the midterm exam, the final exam and meet the requirements.

- For online learning: students need to install learning software and fulfill the teacher's requirements for online learning.
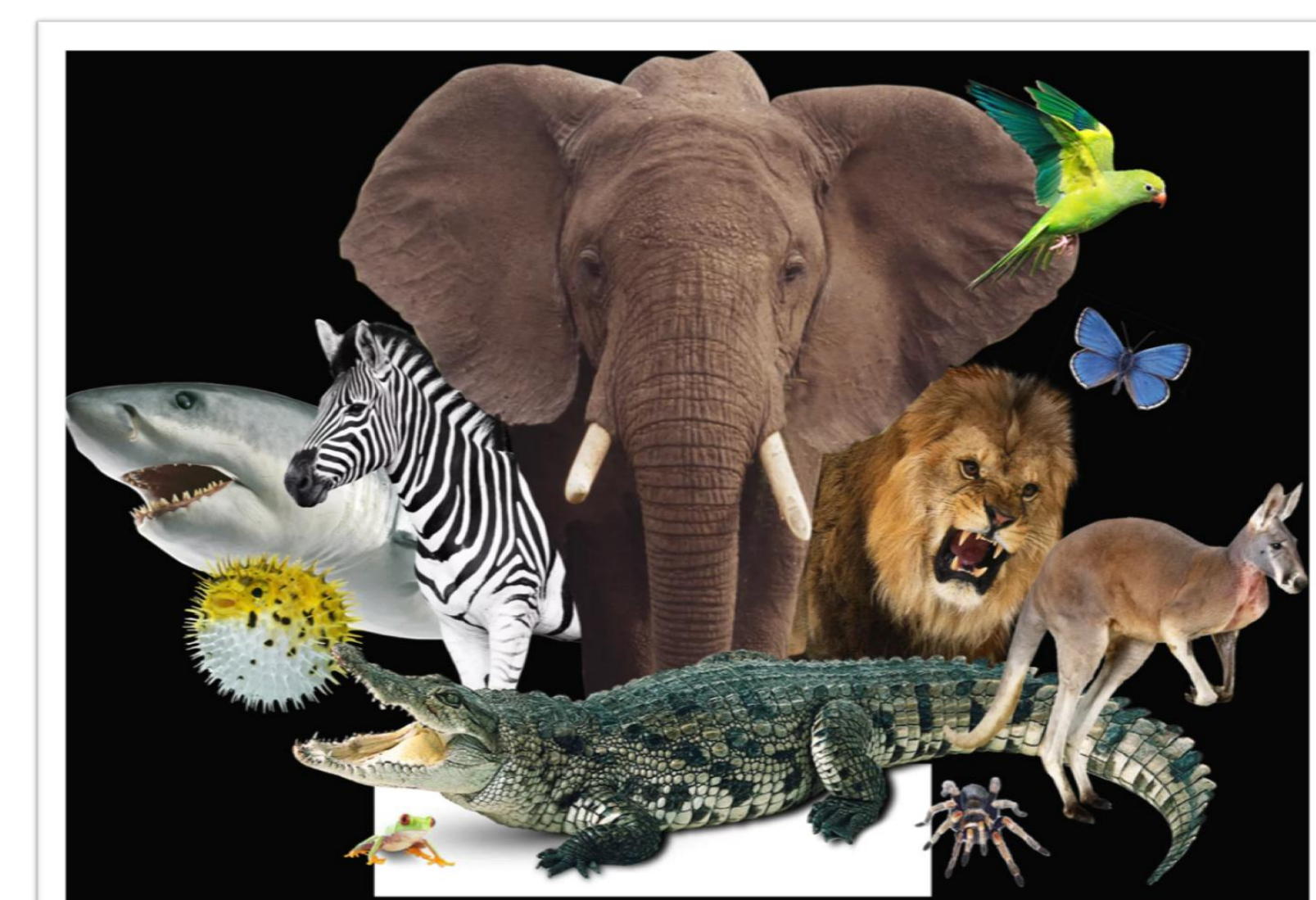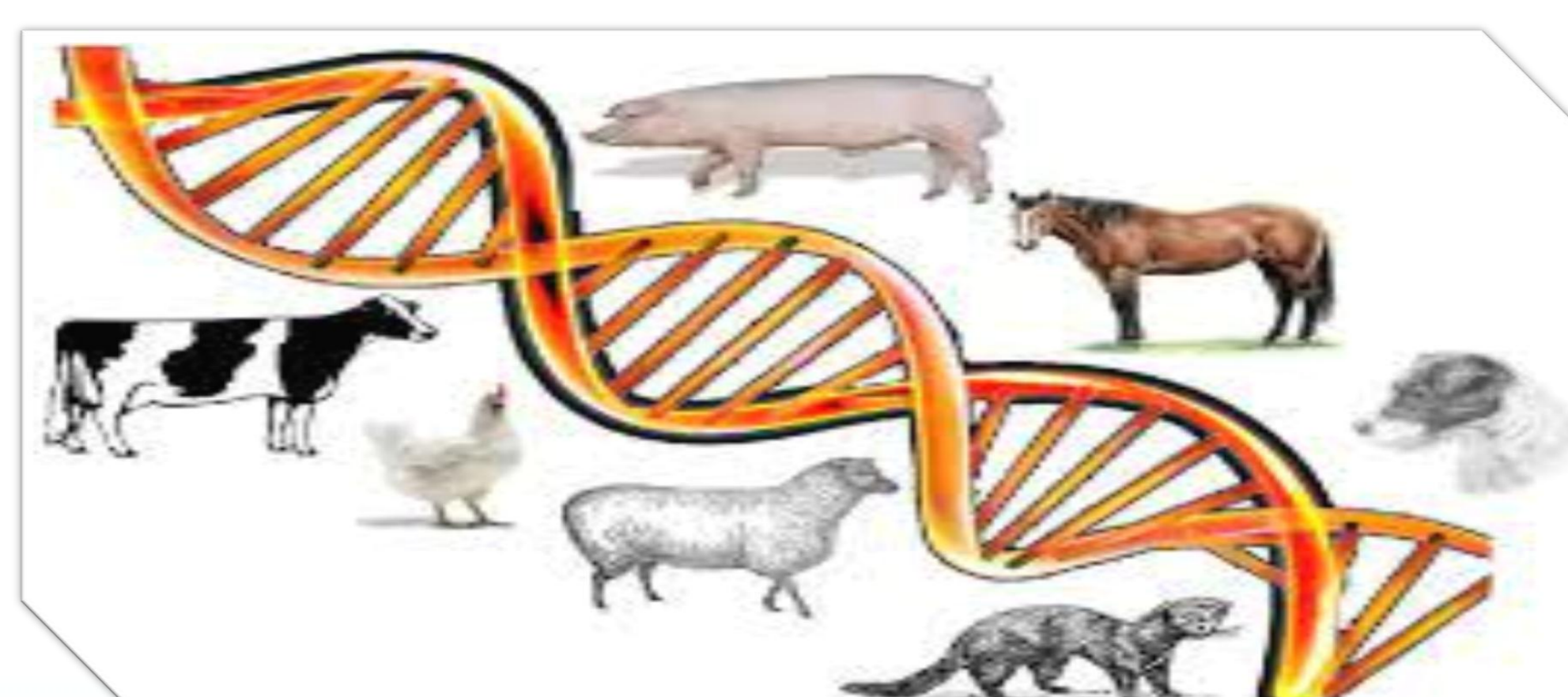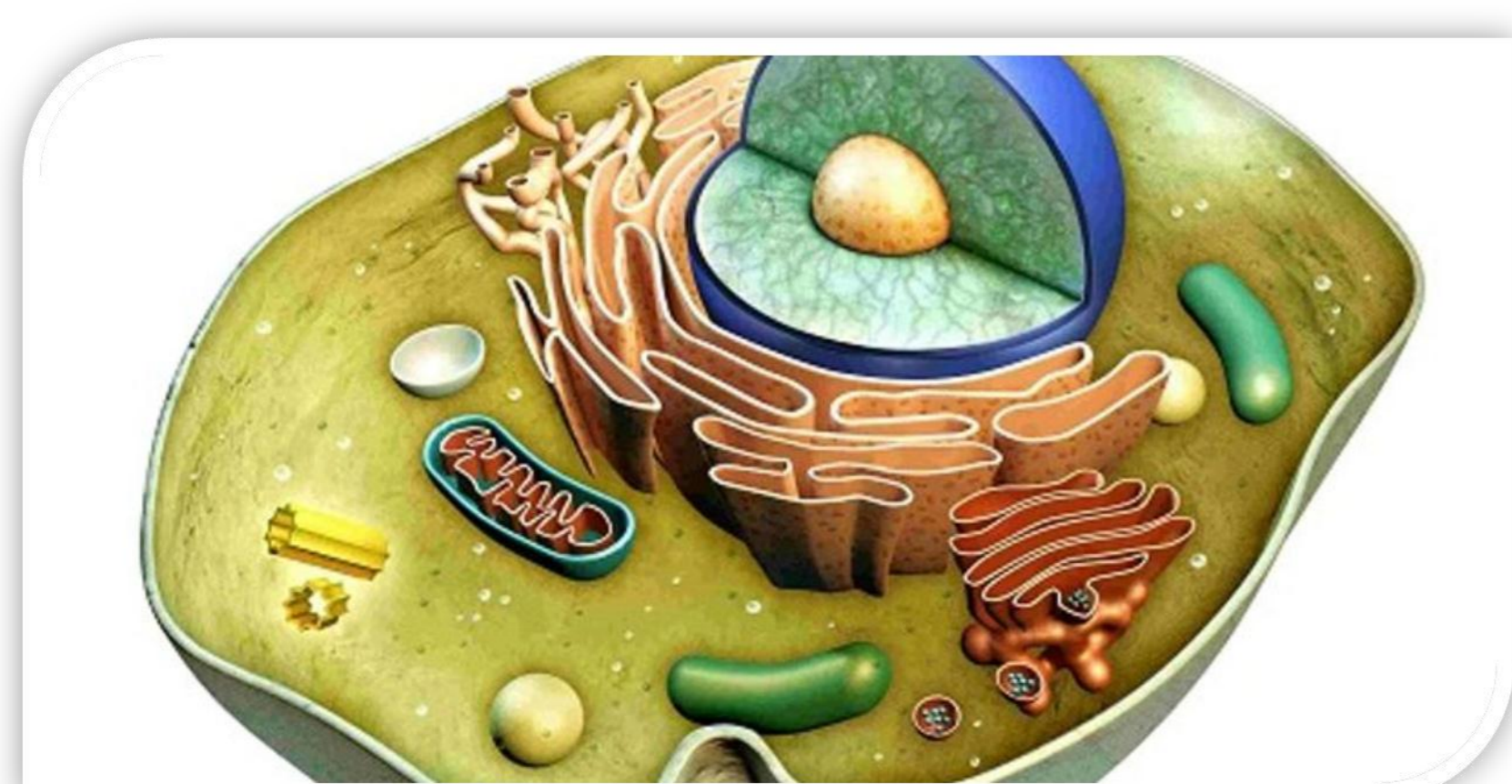

ASSESSMENT METHODS

10 score scale

Course average is the sum of the scores of the rubric, the element multiplied by the respective weight of each rubric, ingredient.

- Attend class: 10%
- Mid-term examination: 30%
- Final exam: 60%

LECTURERS

1. Dr. Nguyễn Hữu Đức 0399606099 nhduc@vnua.edu.vn
2. Dr. Trần Thị Bình Nguyên 0944661010 ttbnguyen@vnua.edu.vn
3. Dr. Ngô Thu Hà 0946549438 Ngothuha@vnua.edu.vn