



SH01005 : FUNFERMENTAO MOLECULAR BIOLOGY

(SINH HỌC PHÂN TỬ ĐẠI CƯƠNG)

Credits: 2 credits (Lecture: 1.5 – Practice: 0.5)

EXPECTED LEARNING OUTCOMES

Course objectives	COURSE EXPECTED LEARNING OUTCOMES After successfully completing this course, students are able to	Expected learning outcomes of program
Knowledge		
CELO1	Analysis at the level of DNA, protein related to biotechnology for animal breed, nutrition and health	ELO2
Skills		
CELO2	Appication of genomic analysis, bioinformatics and molecular biology facility for animal production and marketing	ELO10
Personal autonomy and responsibility		
CELO3	Following law, regulations and ethnics in career	ELO12

CONTENT

- Chapter 1: History of molecular biology
- Chapter 2: Macromolecules: Nucleic acid and Protein
- Chapter 3: Sturcture of gene and genome Chapter 4: DNA replication
- Chapter 5: DNA mutation and repair
- Chapter 6: Gene transcription in eukaryote
- Chapter 7: Genetic code and translation
- Lab practice 1: manipulation on model of DNA strcture
- Lab practice 2: DNA extraction and observation
- Lab practice 3: Physical and chemical properties of DNA

LEARNING METHODS

- Read lecture notes, books and references before attending the class.
- Studying with practicing in lab.
- Students are required to listen to lectures in class and perform other learning activities such as making question and discussion in the class
- Online study

STUDENT TASKS

- Attendance: Students are required to attend at least 80% of the total theory lectures of the course according to regulations of VNUA.
- Preparation for the lecture: Students are required to read lecture notes, text books and references before attending the class.
- Lab practice: all students are requested to attend all time.
- Mid-term exam: Students must take 01 mid-term test.
- Final exam: Students must take the final exam and meet requirements.
- For online learning: Students need to install online learning software and fulfill the requirements for online learning.

ASSESSMENT METHODS

- Grading: 10 marks
- Weighting:
 - ✓ Attendance: 10 %
 - ✓ Formative assessment: 30%
 - ✓ Final exam: 60%

LECTURERS

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