SH02009: EVOLUTION AND BIODIVERSITY

(TIẾN HÓA VÀ ĐA DẠNG SINH HỌC)

Credits: 3 credits (Lecture: 3 – Practice: 0)

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	Application of knowledge on evolution and biodiversity in agriculture and practical applications	ELO1
CELO2	Utilization of knowledge on evolution and biodiversity for evaluation, conservation and development of crop resource in research and production.	ELO2
Skills		
CELO3	Development of program proposal for conservation of biodiversity, plant resource and ecosystem for solving problems.	ELO6
Personal autonomy and responsibility		
CELO4	Having a sense of professional ethics and responsibility, complying with the laws and principles of occupational safety	ELO14
CELO5	To act professionally, lawfully, honestly and responsibly to ensure that risks and hazards are minimized, and biological ethics must be respected.	ELO15

CONTENT

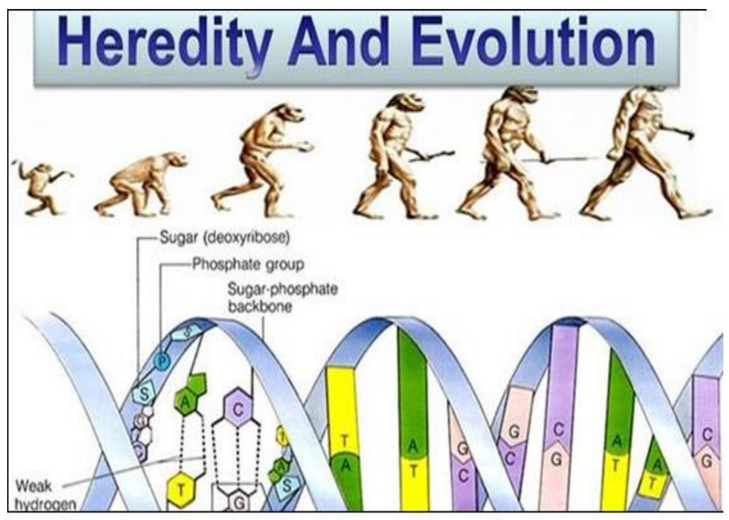
- Chapter 1: Darwinian Theory of Evolution.
- Chapter 2: Evolution and evidence.
- Chapter 3: Population - the basic unit of evolution.
- Chapter 4: Natural selection and adaptation.
- Chapter 5: Species and species formation mechanism.
- Chapter 6: Chromosome and genome evolution.
- Chapter 7: Individual generation and species generation.
- Chapter 8: The Origin of Life.
- Chapter 9: Human origins.
- Chapter 10: Types of biodiversity
- Chapter 11: Impacts on Biodiversity
- Chapter 12: Biodiversity in Vietnam
- Chapter 13: Conservation of genetic resources

LEARNING METHODS

- Read lecture notes, books and references before attending the class.
- Students are required to listen to lectures in class and perform other learning activities such as solving practice problems after class.
- Prepare and actively participate in discussion.

STUDENT TASKS

- Attendance: Students are required to attend at least 2/3 of the total theory lectures of the course.
- Preparation for the lecture: Students are required to read lecture notes, text books and references before attending the class.
- Group discussion and presentation: Students are required to engage in group discussion.
- Mid-term exam: Students miss a mid-term will be given a mark of zero.
- 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

- Attendance: According to regulations of VNUA.
- Exercise and progress tests: Students must complete the exercises, 15-minute tests, group discussion and presentation with satisfied results.
- Mid-term exam: Midterm exam is 50 minutes long with a 50-question quiz.
- Final exam: Final exam is 50 minutes long with a 50-question quiz.
- For online evaluation: Students need to install software and fulfill the requirements for online evaluation.
- Grading: 10/10 marks, weighting:
  - ✓ Attendance: 10 %
  - ✓ Formative assessment: 30%
  - ✓ Final exam: 60%

LECTURERS

1. Prof.. Dr. Phan Hữu Tôn (0912463037, phanhuuton@yahoo.com)
2. Assc.Dr. Nguyen Duc Bach (0983926497, ndbach@vnua.edu.vn)