COURSE SYLLABUS

PRACTICE OF SPECIALIZED MICROBIOLOGY

Credits: 01 (Practices 01 – Self-study 03)

Code: MT02049

EXPECTED LEARNING OUTCOMES

Indicator	Upon completion of the course, Student able to	Expected learning outcomes of program
Knowledge		
CELO1	Apply the basic knowledge to construct a intensive microbiological projects	ELO1: Apply the knowledge of natural sciences, politics, society, humanities, law, economics and understand contemporary issues in the field of environmental sciences
CELO2	Isolate microbiology, identify biological properties of isolated microbiology	ELO2: Analyze environmental quality including designing and conducting experiments, collecting data, and interpreting results.
CELO3	Select suitable microbiological strains to create genetic resources in environmental treatment	ELO4: Develop sustainable solutions for the management and protection of the environment and natural resources based on different perspectives of natural science, social science, and humanities. ELO5: Design waste treatment facilities (solid wastes, wastewater, and air pollutants) according to national and international standards and regulations.
Skills		
CELO4	Collaborate in teamwork to conduct experiments and prepare a project report.	ELO7: Work in groups and lead multi-functional teams effectively.
CELO5	Use information technology and modern equipment	ELO10: Use modern technology, equipment, and techniques in the management and protection of the environment and natural resources.
Attitude		
CELO6	Actively studying, researching materials under the guidance of the lecturer	ELO11: **Define** a clear career orientation; possess a passion for one's career and a sense of lifelong learning.

COURSE CONTENTS

Lesson 1: Construction and presentation the proposal

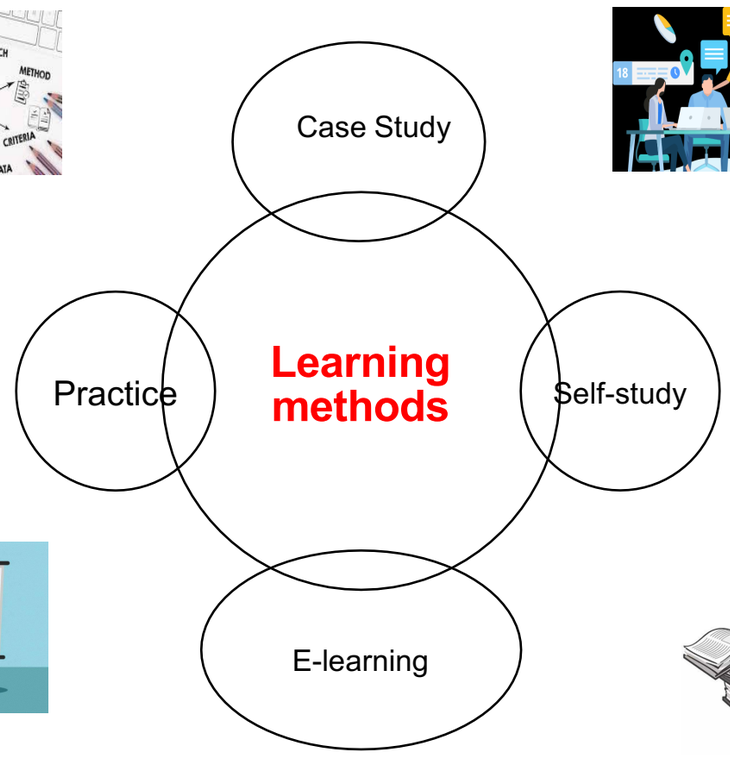
Lesson 2: Isolation and preliminary selection of microbiology from samples

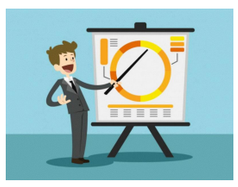
Lesson 3: Purifying isolated microbiological strains

Lesson 4: Keeping microbiological strains from purification

Lesson 5: Assessing enzyme activity of microbiology

Lesson 6: Completing the report of project





STUDENT RESPONSIBILITY

- Diligence: All students must comply with all the content of the course syllabus and fully complete the products according to the implementation stage.
- Preparing for the project: Students must study, learn the materials provided by the project's teaching staff, make reports, and discuss in groups when required.
- Use E-learning to find materials, discuss and exchange practice results.
- Students must submit complete reports on time.

ASSESSMENT METHODS

1. **Grading scale: 10**
2. **Evaluation:**
   - Assessment of project outline: 20%
   - Implementing the project: 50%
   - Assessment of Project's report: 30%

CONTACT

Course management

- **Department of Microbiology, Faculty of Natural Resourse and Environment, Vietnam National University of Agriculture**

Course coordinator

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