



SH03010: PROTEIN-ENZYME TECHNOLOGY

(CÔNG NGHỆ PROTEIN-ENZYME)

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	Program expected learning outcomes
Knowledge		
CELO1	Apply general knowledge about proteins/enzymes, methods and techniques for protein/enzyme analysis	ELO4
CELO2	Apply knowledge in the production and application of proteins/enzymes	ELO4
CELO3	Modify proteins/enzymes to improve their activity	ELO4
Skills		
CELO4	Solve effectively issues related to research and application of proteins/enzymes in life	ELO6
CELO5	Apply protein/enzyme analysis techniques appropriately in scientific research	ELO10
Personal autonomy and responsibility		
CELO6	Comply with safety rules at the workplace	ELO13

CONTENT

Chapter I: Classification, structure and functions of proteins

Chapter II : Enzyme classification and enzyme kinetics

Chapter III: Protein/enzyme extraction techniques

Chapter IV : Qualitative and quantitative methods and protein-enzyme separation

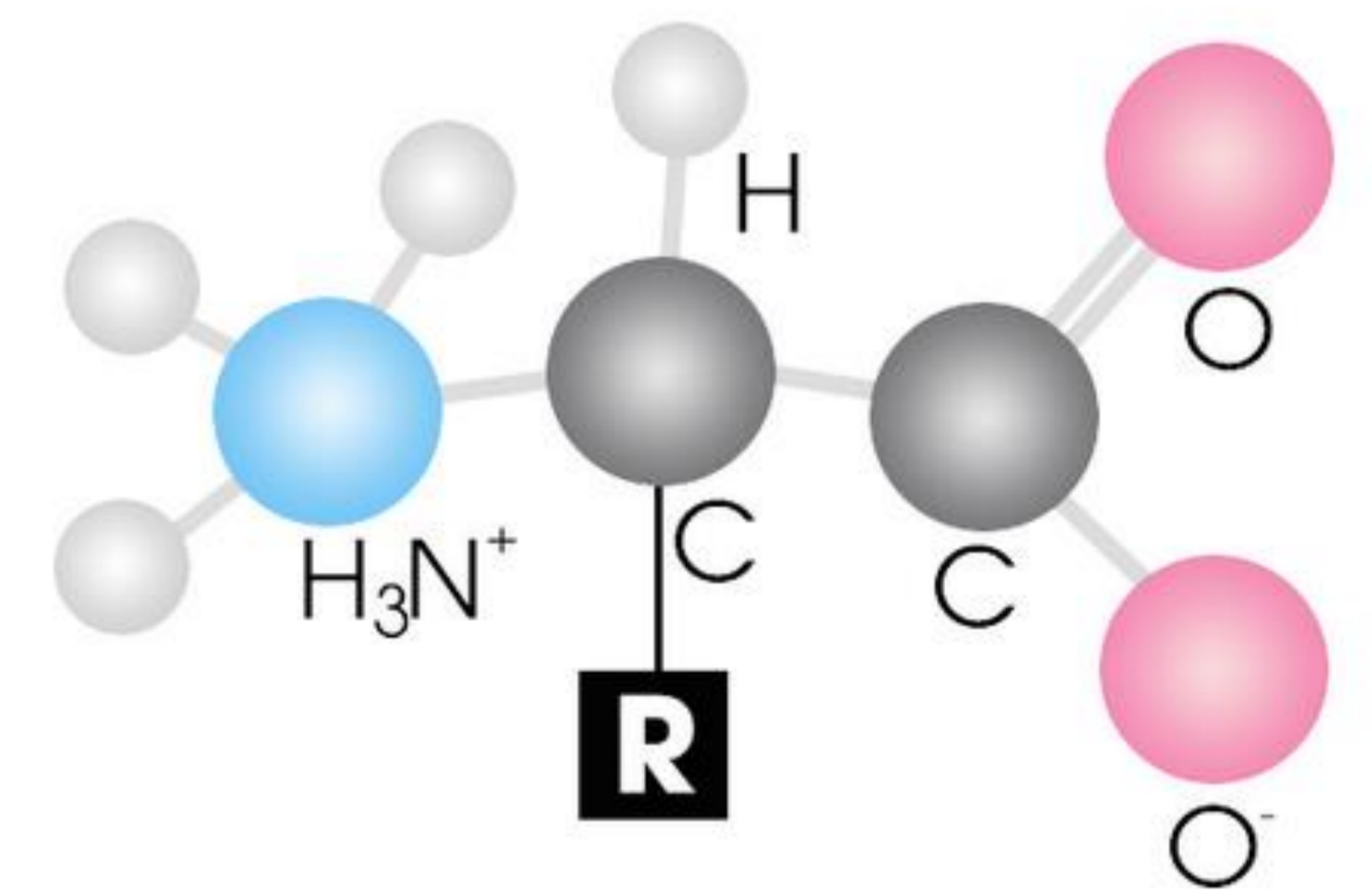
Chapter V: Recombinant protein technology

Chapter VI: Principles and processes of protein-enzyme modification

Chapter VII : Production and applications of protein-enzyme

STUDENT TASKS

- Students are required to attend at least 75% of the total theory lectures of the course
- Students are required to read lecture notes, text books and references before attending the class, actively study and engage in group discussion
- Students must take the mid-term exam and final exam and meet requirements
- For online learning: students need to install online learning software and fulfill the requirements for online learning

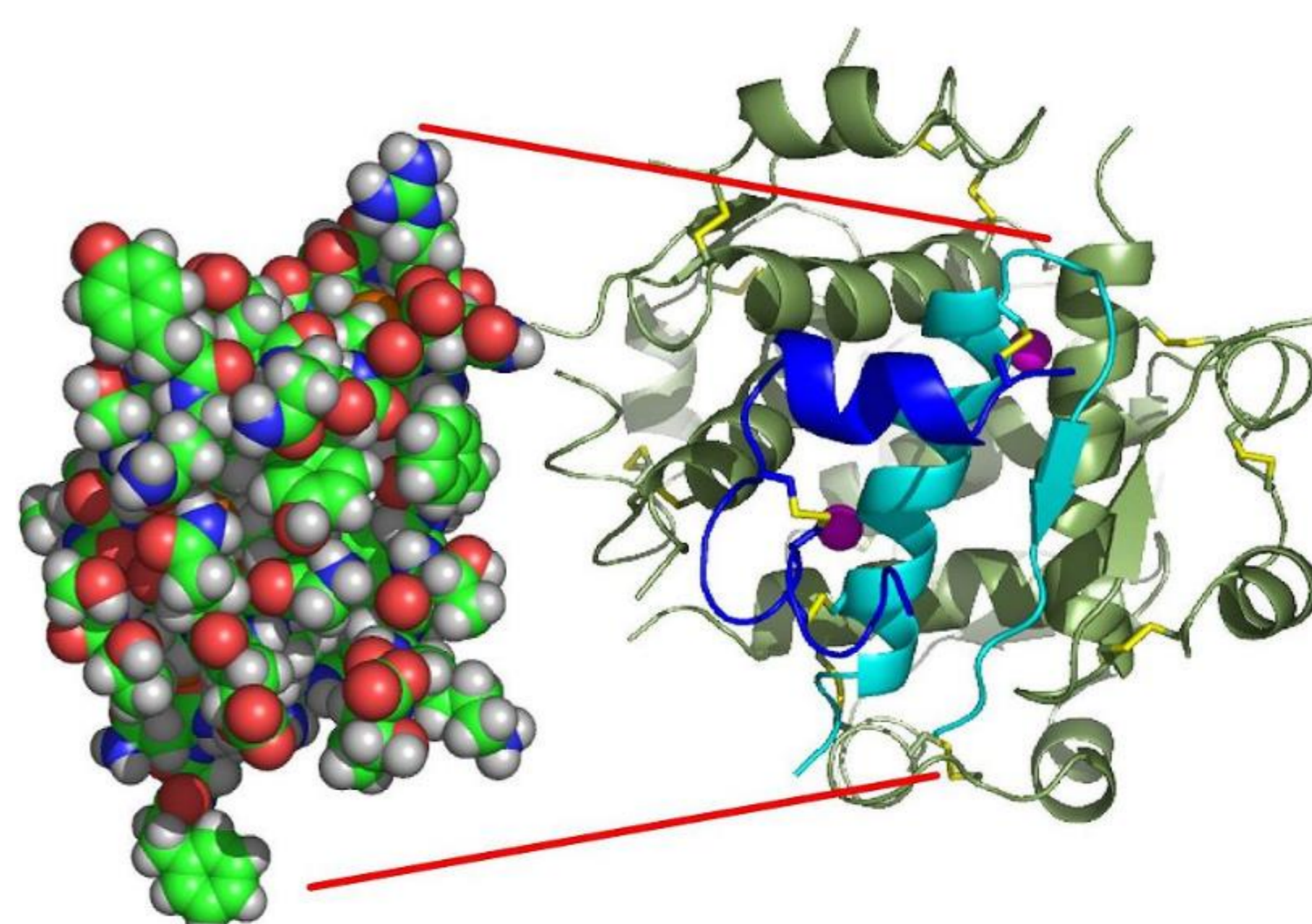
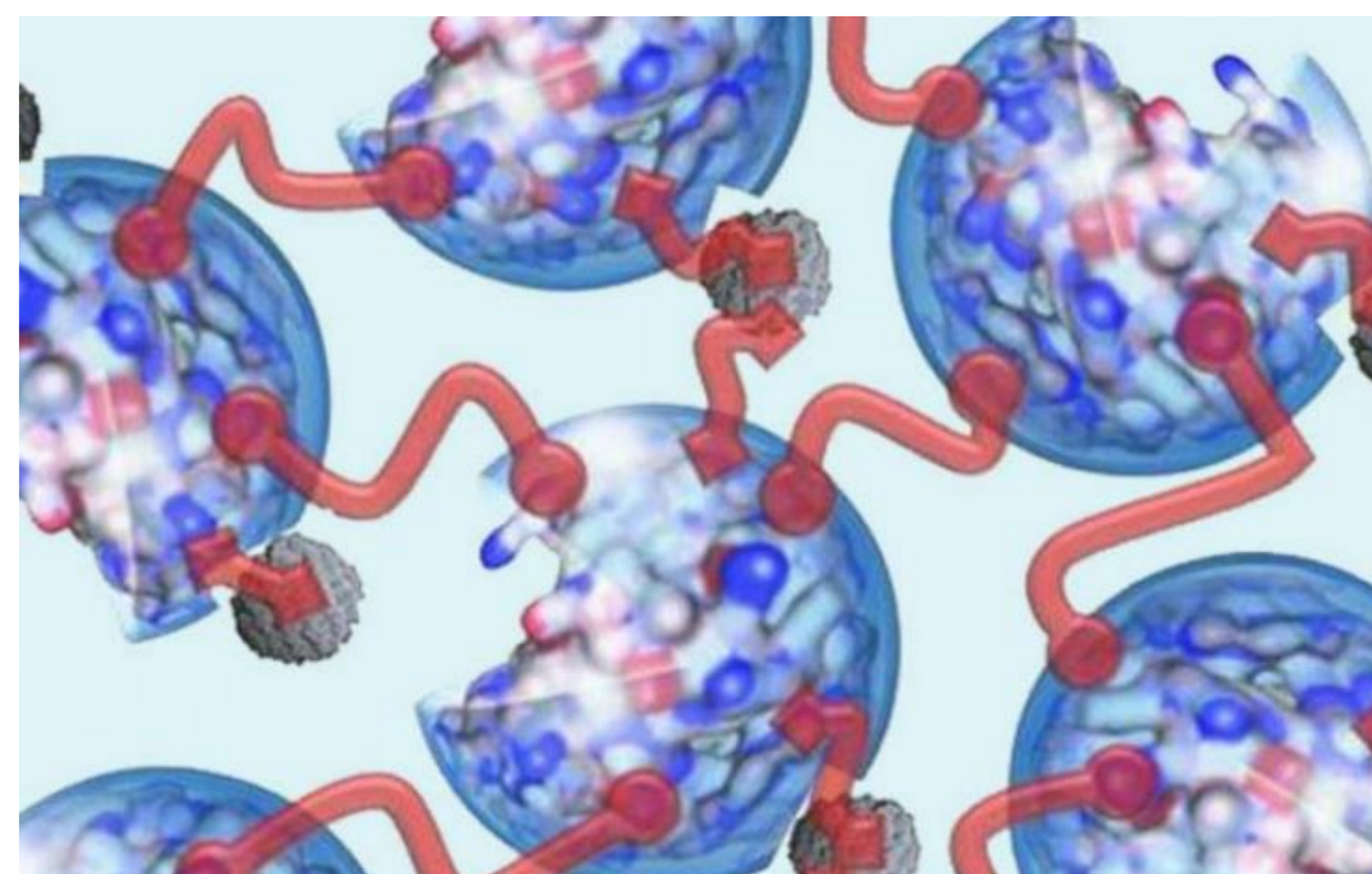
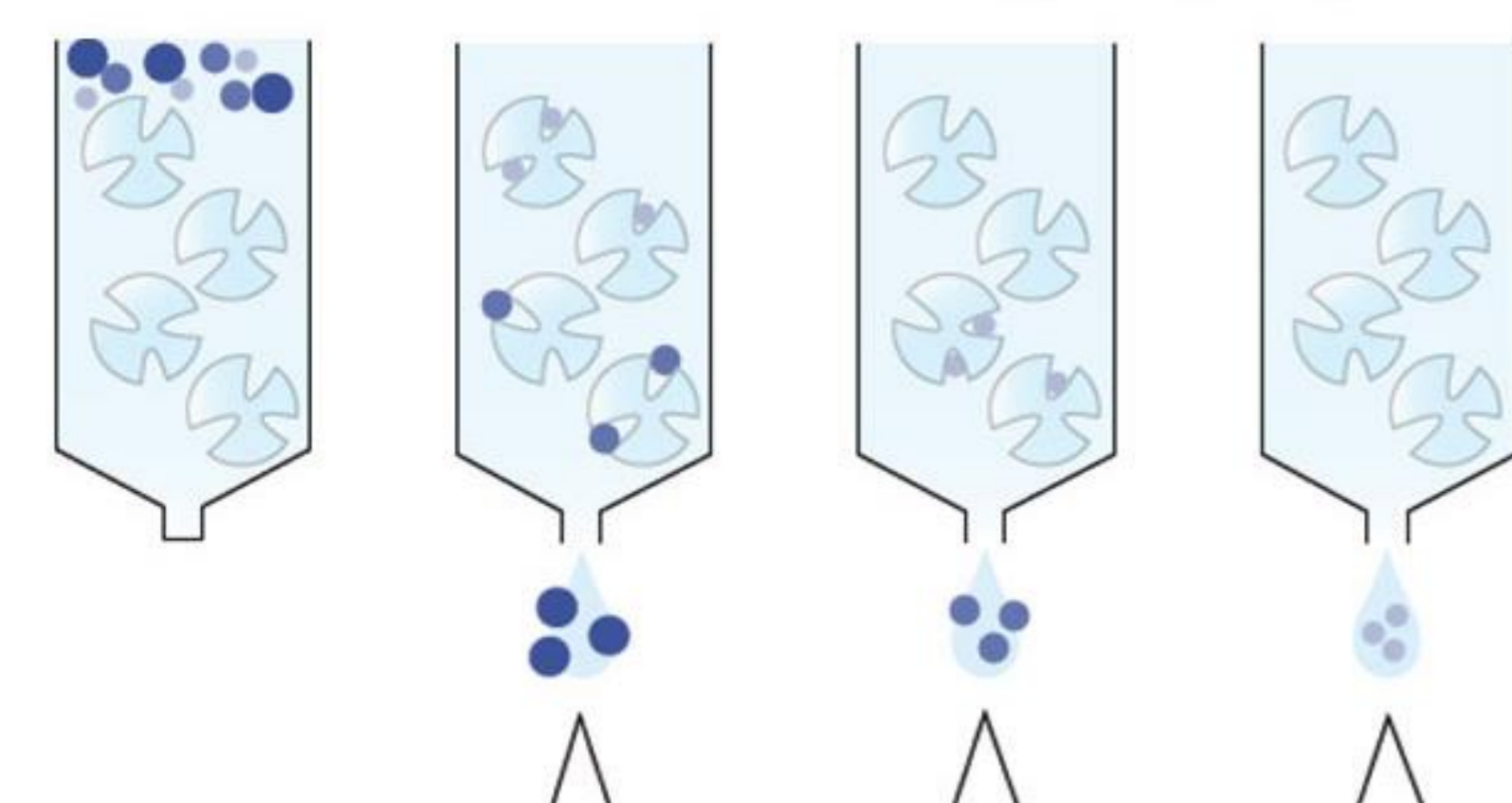


ASSESSMENT METHODS

- Grading: 10 marks
- The average score of the course is score of each rubric multiplying with the corresponding weight of each rubric
- Class attendance - 10%
- Seminar – 10%
- Mid-term exam - 20%
- Final exam - 60%.

LEARNING METHODS

- Reading lecture notes, books and references before attending the class
- Participating in learning activities in the class: presenting, answering the questions and discussing in groups
- Online learning



LECTURES

1. Assoc. Prof. Ph.D. Nguyen Xuan Canh, 0983009828, nxcanh@vnua.edu.vn
2. Assoc. Prof. Ph.D. Nguyen Van Giang, 0986383847, nvgiang@vnua.edu.vn
3. MSc. Nguyen Thanh Huyen, 0966201281, huyenlinh178@gmail.com
4. MSc. Tran Thi Hong Hanh, 0988029388, honghanh@vnua.edu.vn