



CP02016: FOOD ENGINEERING 2

Credits: 2: Theory: 2 – Practical: 0



EXPECTED LEARNING OUTCOMES

Notation	Expected learning outcomes After completing this course, a student is able to:	Program expected learning outcomes
Knowledge		
K1	Able to apply physical and chemical knowledge to explain the theoretical basis of the mass transfer processes in food technology	ELO2, ELO3, ELO4, ELO5
K2	Able to analyze material variations and technological factors influencing mass transfer processes including distillation, extraction, absorption, concentration, drying, and crystallization in food technology	ELO2, ELO3, ELO4, ELO5
K3	Able to analyze and machines and equipment used in mass transfer processes including distillation, extraction, adsorption, concentration, drying, and crystallization in food technology	ELO2, ELO3, ELO4, ELO5
Skills		
K4	Able to work independently or on a team in calculating basic parameters and developing creative thinking to solve problems commonly in food processing	ELO12, ELO13
Attitude		
K5	Serious in learning, socially responsible, and professional ethics, complying with regulations and laws in food production	ELO15

COURSE DESCRIPTIONS

Chapter 1: Introduction

Chapter 2: Distillation process and equipment

Chapter 3: Solid – liquid extraction process and equipment

Chapter 4: Adsorption and ion exchange process and equipment

Chapter 5: Concentration process and equipment

Chapter 6: Drying process and equipment

Chapter 7: Crystallization process and equipment

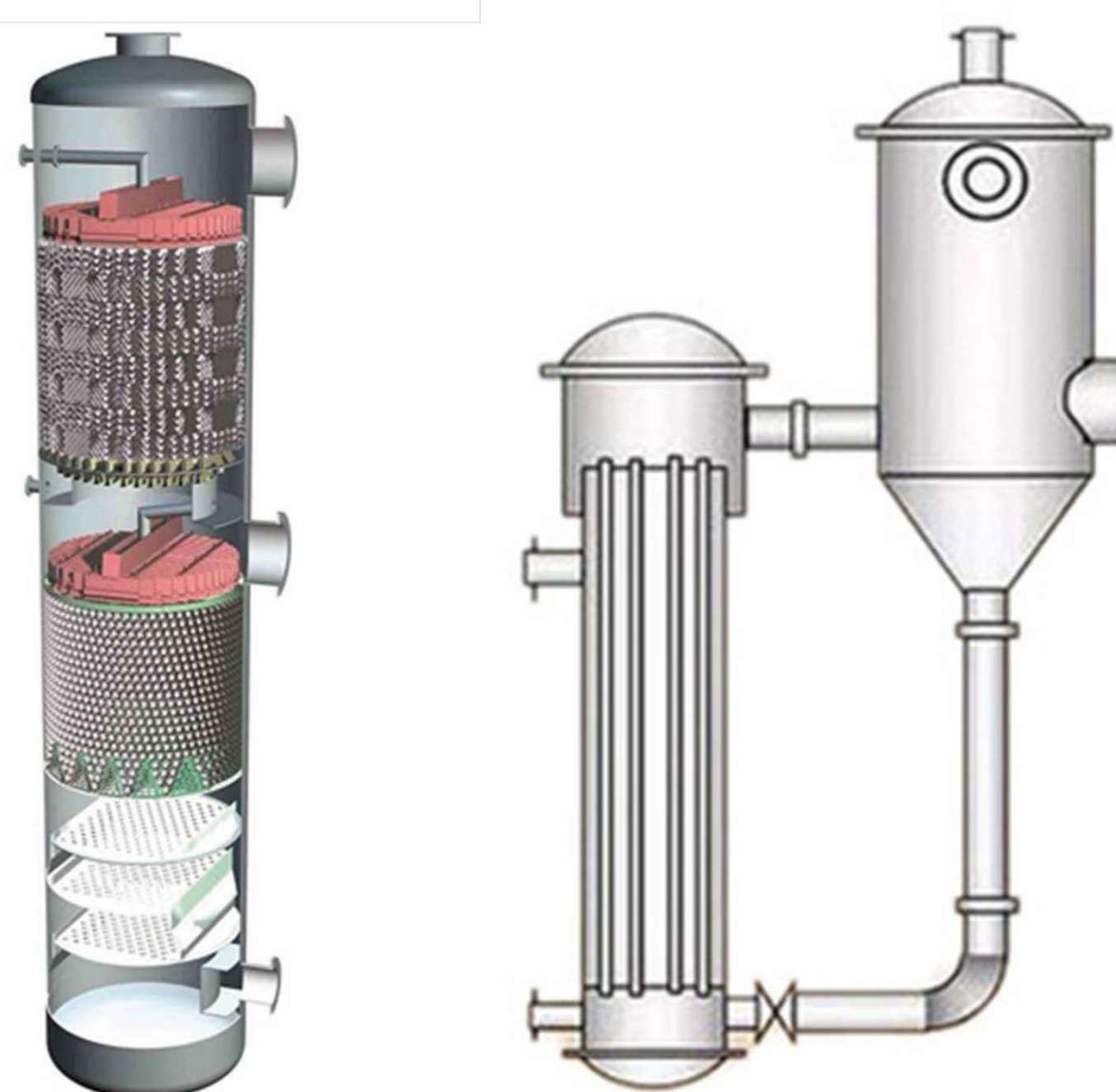
LEARNING METHODS

- Attending the classes
- Preparing and reading materials before coming to classes
- Group discussion



STUDENT TASKS

- Attending at least 75% of theory hours.
- Prepare for lectures, read reference materials before attending the classes
- Actively pose questions, exchange knowledge, enthusiastic learning.



ASSESSMENT METHODS

- Score sale: 10
- Course score is total score of all rubrics multiply with weighting factor of each rubric
- Exercise assessment: 10%
- Process assessment: 30%
- Final assessment: 60%



LECTURERS IN CHARGE

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