



# CD02301: THERMOTECHNICS

Total credits 2: Theory 2.0 - Practice 0.0 – Self-study: 6.0



## EXPECTED LEARNING OUTCOMES

Notation	Course expected learning outcomes After successfully completing this course, students are able to	Expected learning outcomes of program
<b>Knowledge</b>		
K1	Analyze the influence of technical factors in the thermal equipment system to select heat exchangers suitable for the food production process to improve equipment efficiency, ensure and improve the quality of food products.	ELO3
K2	Evaluate of the effectiveness of thermal equipment systems in the production of food products in accordance with the economic, social and environmental protection requirements of Vietnam and the world	ELO3, ELO4
K3	Build food processing system using heat method, programs and food quality assurance system according to national and international standards.	ELO5
<b>Skills</b>		
K4	Calculate process parameters and heat exchangers to select the right process and equipment for the food production line	ELO12
K5	Control technical parameters in heat processing has a great influence on the change in food quality in heat preservation and processing.	ELO13

## COURSES DESCRIPTION

Chapter 1. Basic concepts and principles of thermodynamics

Chapter 2: Determining the state of the medium

Chapter 3: Thermodynamic processes of the medium

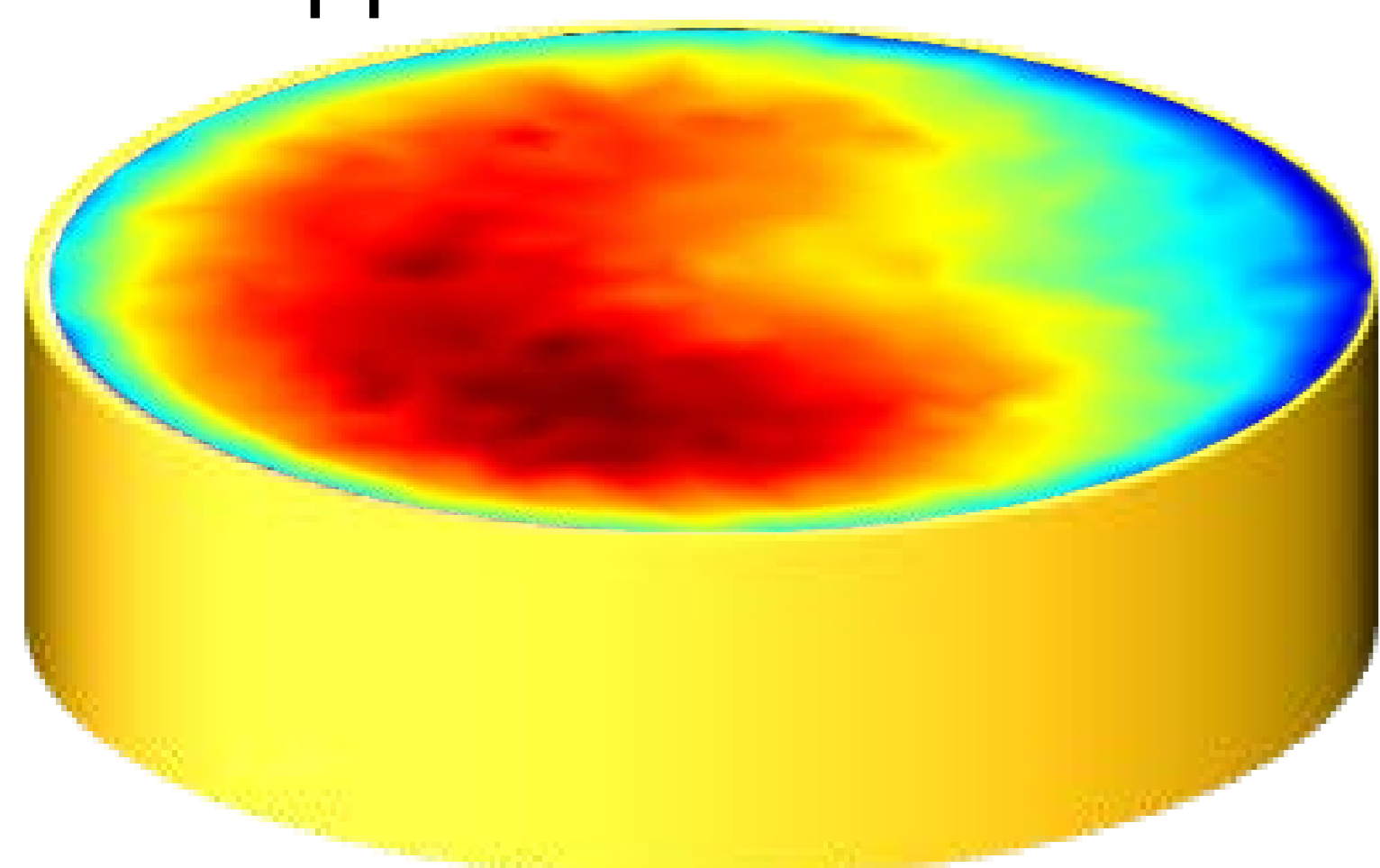
Chapter 4: Realistic Heat Cycles

Chapter 5: Theory of Heat transfer

Chapter 6: Heat Exchanger

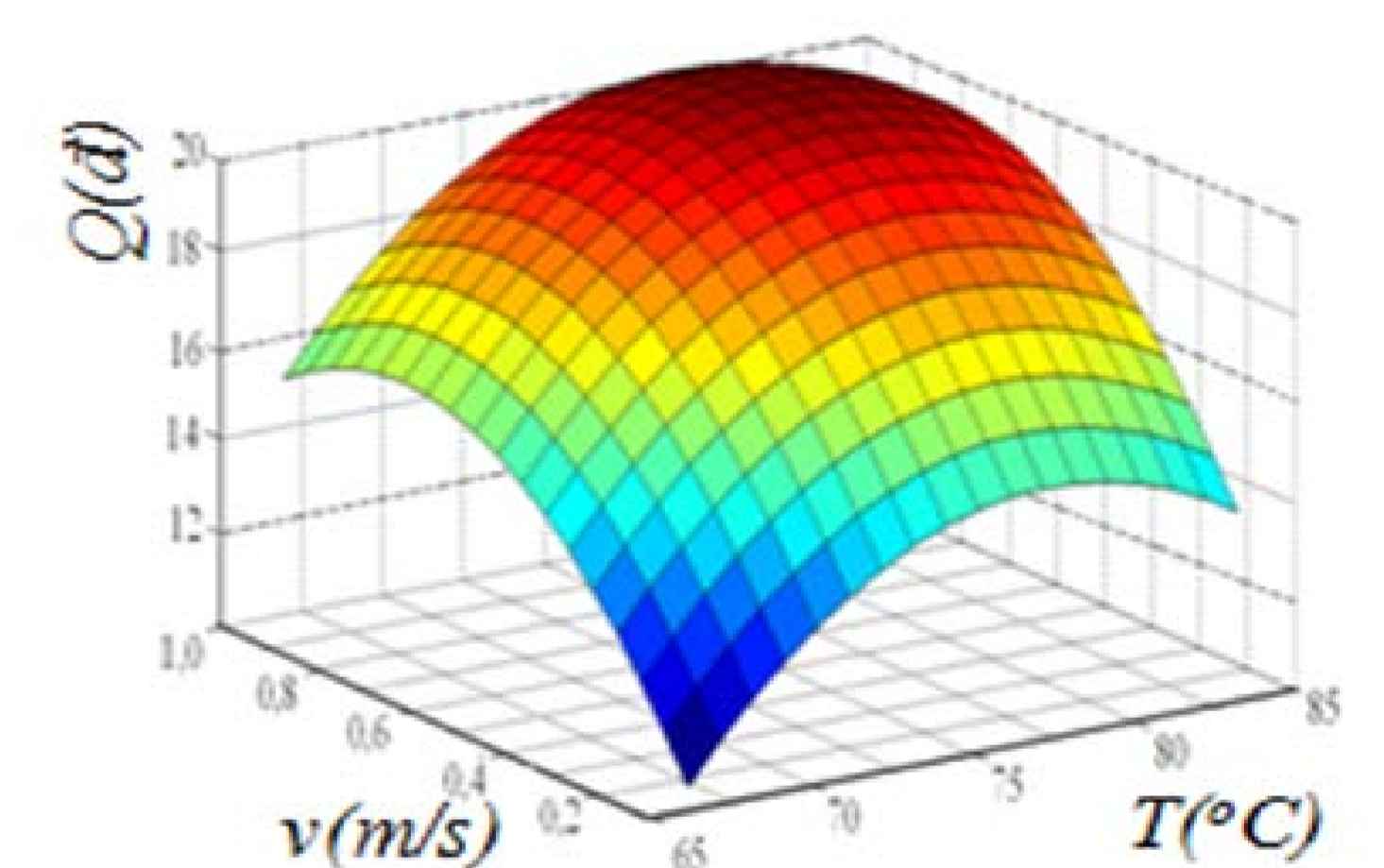
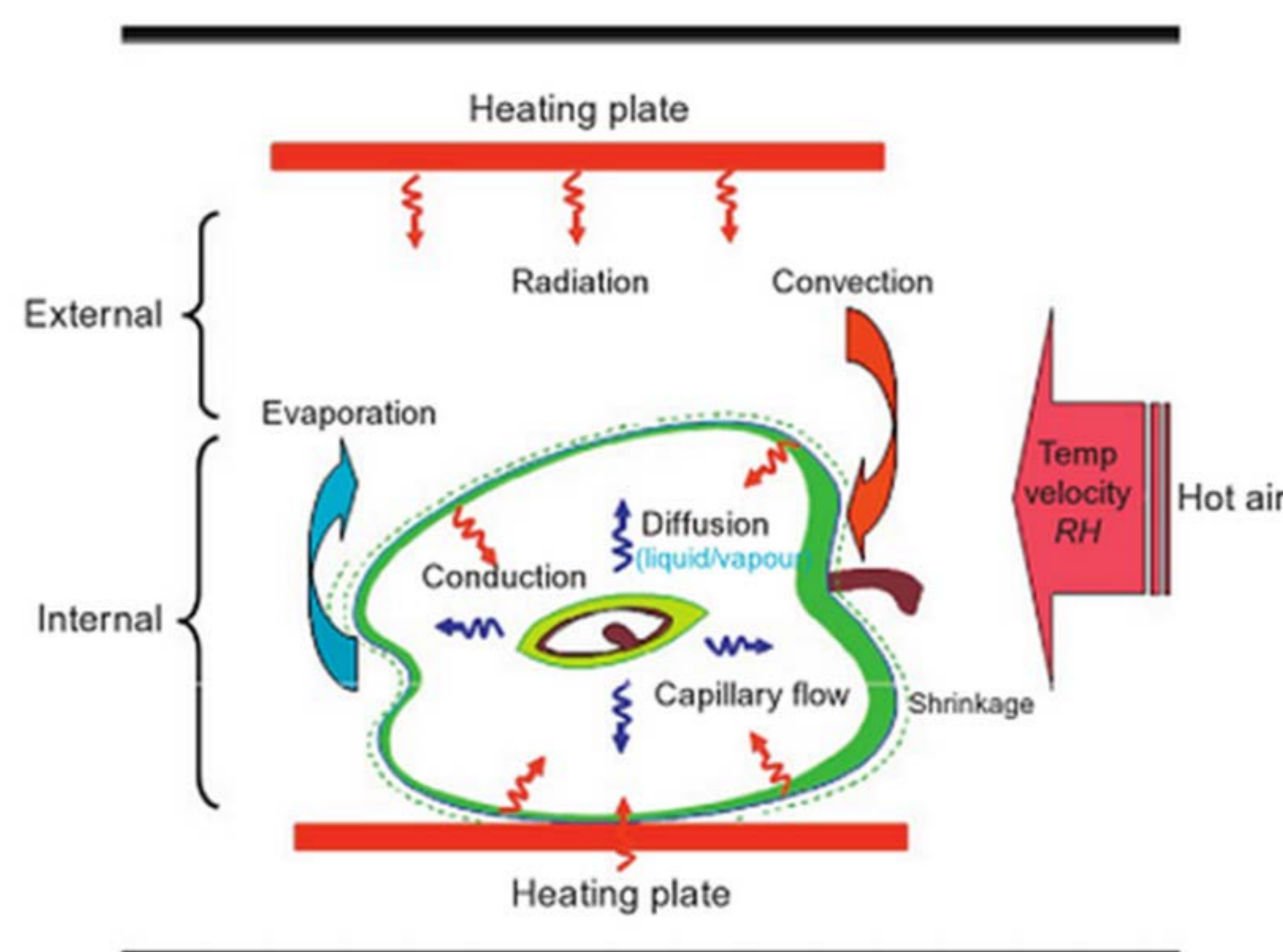
## LEARNING METHODS

- Participate in classroom learning
- Read the material at home before going to class
- Group discussions and presentations
- Do the application exercise



## STUDENT TASKS

- Attend 80% of theory classes.
- Prepare for lectures, read reference books before going to class
- Actively participate in questioning, communicating, participating in assignments and demonstrating a desire to learn.



## ASSESSMENT METHODS

- Grading: 10
- Average score of course is the total points of rubrics multiplied by the respective weight of each rubric.
- Formative assessment: Participation (10%); presentation (20%) and midterm test (20%)
- Summative assessment: Final exam - essay (50%)

## LECTURERS

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