

PROGRAMME LEARNING OUTCOMES (PLOs)

KNOWLEDGE

PLO 1	Apply natural, social, technical and economic knowledge to solve problems in preservation, processing, testing, and research and development of food products.
PLO 2	Formulate production procedures based on the analysis of technical factors to ensure and enhance product quality.
PLO 3	Design quality management systems for processing plants to ensure food hygiene and safety.

SKILL

PLO 4	Perform work planning, demonstrate creatively critical thinking, work independently and effectively as a team leader or member.
PLO 5	Demonstrate communication skills and use specialized English in food technology.
PLO 6	Operate production equipment in food manufacture factories.
PLO 7	Analyse product quality criteria in food preservation and processing procedures.
PLO 8	Design research to address technological and regulatory problems in the food industry through the evaluation of information, scientific data and information technology applications.

ATTITUDE

PLO 9	Work professionally, maintain professional ethics, social responsibility, and demonstrate personal physical development.
PLO 10	Demonstrate the spirit of entrepreneurship and life-long learning.



COURSE CONTENT

- ✓ **Lesson 1:** Metabolism
- ✓ **Lesson 2:** Browning in food
- ✓ **Lesson 3:** Water in food technology
- ✓ **Lesson 4:** Biochemical changes of fruits and vegetables - grains after harvest Lesson
- ✓ **Lesson 5:** Biochemical changes of animal and aquatic meat materials after death
- ✓ **Lesson 6:** Pigments in food

Browning 101: Browning Reactions

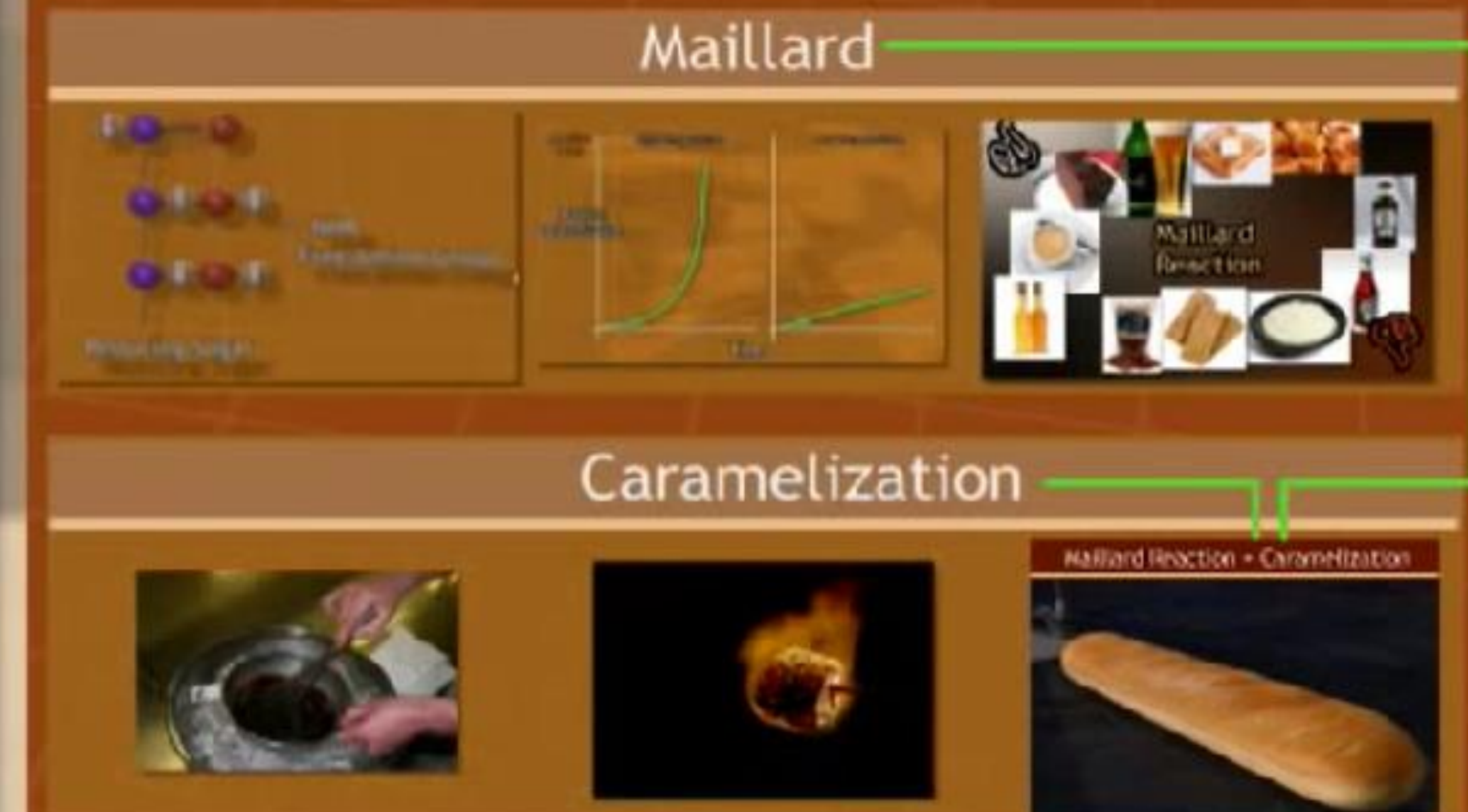
Enzymatic Browning

Enzymatic Browning



Non-Enzymatic Browning

Non-Enzymatic Browning

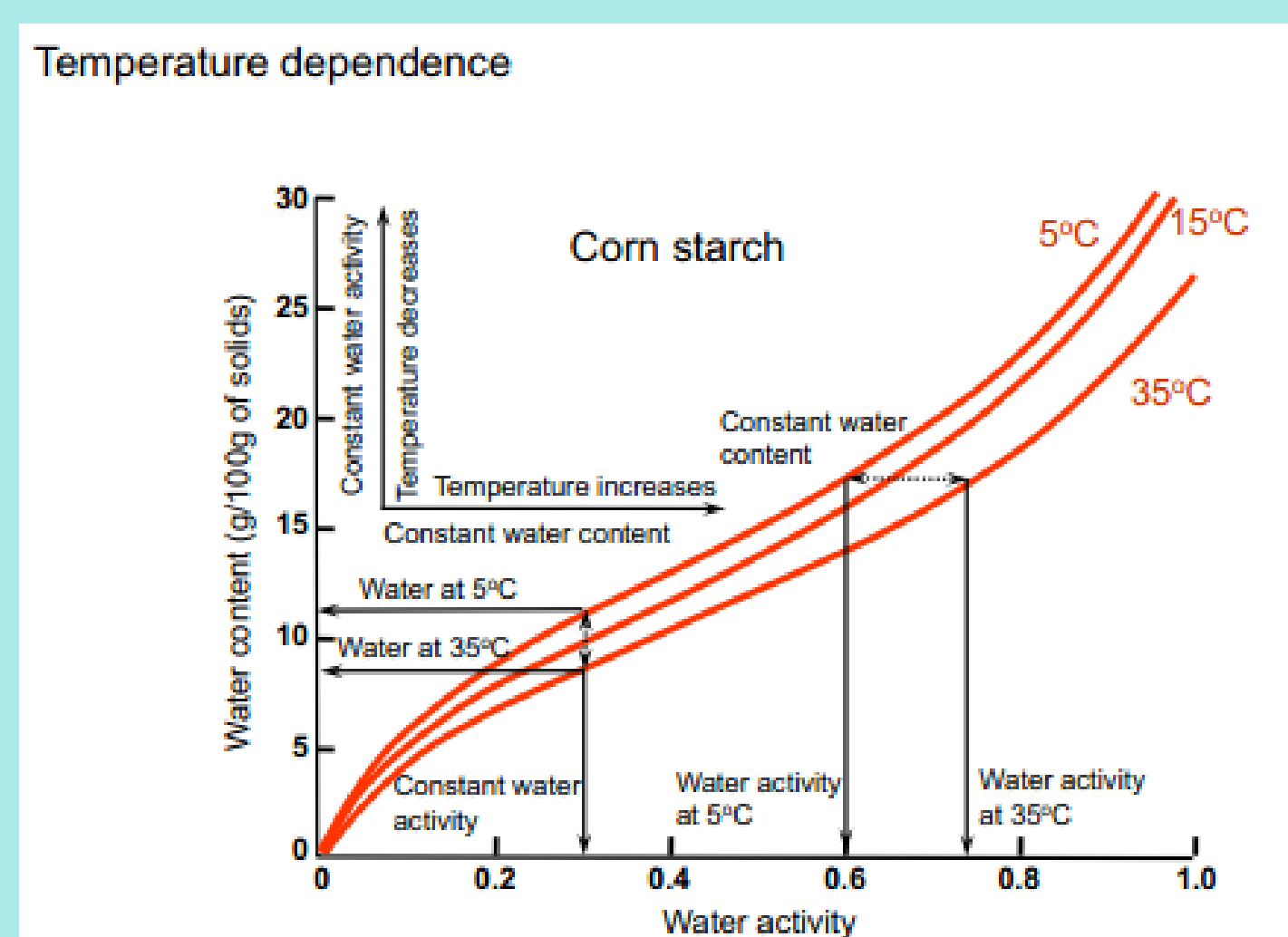


EXPECTED LEARNING OUTCOMES OF COURSE (CELOs)

Symbol	Expected learning outcomes of the course	PLOs of program
KNOWLEDGE		
CELO1	Apply knowledge of post-harvest agricultural products, post-mortem animal and plant materials, and water in food technology to explain issues related to the food sector.	PLO 1
CELO2	Explain the physiological and biochemical changes of agricultural products after harvest, animal materials after death.	PLO 1
SKILLS		
CELO3	Analyse chemical indicators in food technology	PLO 7
CELO4	Apply information technology to process analysis results, work in groups, report in groups, use foreign languages to read professional documents in the field of food chemistry.	PLO 4, 5
CELO5	Operate equipment and machinery in analysis qualitative and quantitative analysis.	PLO 6
ATTITUDE		
CELO6	Comply with laboratory safety rules, work professionally, socially responsible	PLO 9
CELO7	Demonstrate the spirit of entrepreneurship and life-long learning.	PLO 10

LEARNING METHODS AND TASKS

- Students read the lesson first at home
- Listen to lectures, discuss
- Practice in the lab



ASSESS AND GIVE US POINTS

- ✓ Score scale: 10
- ✓ Diligently, attend class
- ✓ Evaluation of the process: 50%
- ✓ Final evaluation: 50%

TEACHERS IN CHARGE OF COURSE

Center for Post-Harvest Technology, Faculty of Agriculture and Aquaculture, Tra Vinh University
 No. 126, Nguyen Thien Thanh Street, Ward 5, Tra Vinh City
 Teacher in charge: Vo Minh Hoang. Tel: 0935. 087. 969; Email: vmhoang@tvu.edu.vn
 Other lecturer: Nguyen Kim Phung. Tel: 0987. 857. 758 ; Email: nphung@tvu.edu.vn