Subject Description Form

Subject Code	ABCT4414
Subject Title	FOOD PROCESSING LABORATORY
Credit Value	1
Level	4
Co-requisite	Food Processing II (ABCT4413)
Exclusion	-
Objectives	This subject aims to allow students to apply and integrate the principles learnt in lectures and gain hands-on experience in food processing techniques.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a) gain deeper appreciation of the principles and concepts learnt in related food chemistry and food processing subjects; b) acquire the practical skills in food preservation and processing; c) recognize the effects of processing conditions on the physical and chemical properties of food products and inhibit the undesirables; d) develop better skills in planning and conducting experiments, collecting experimental data, analyzing and interpreting results, and writing technical reports.
Subject Synopsis/ Indicative Syllabus	Thermal processing and factors affecting quality of food Basic operational principle of spray dryer and tray dryer Packaging with Metal: Sealing of cans and inspection of double seam
Teaching/Learning Methodology	Laboratory classes provide the students the practical skills in food processing, and help to develop their ability to conduct experiment, observe and analyze experimental results and to write scientific reports

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a	b	c	d		
1. class performance	30		√		√		
2. lab report	70	√	√	√	√		
Total	100 %						

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

This is a laboratory subject and how the students perform in the laboratory would be an important aspect of assessment. In this course, performance in the laboratory is a mark given by the demonstrators and/or instructors to indicate whether the students prepared well before the laboratory session and his or her ability to conduct the experiments effectively. Laboratory reports are used to evaluate students' ability to analyze and interpret the data obtained.

Student Study Effort Expected

Class contact:	
▪ Laboratory	16 Hrs.
▪ Tutorial/plant visit	3 Hrs.
Other student study effort:	
▪ Report writing	15 Hrs.
▪ Self-study	15 Hrs.
Total student study effort	49 Hrs.

Reading List and References

Essential

Smith, J.S. and Hui, Y.H., Food Processing: Principles and Applications, Blackwell Publishing 2004

Robertson, G.L., Food Packaging: Principles and Practice (3rd ed.), Taylor & Francis 2011

Jaiswal, A.K., Food Processing Technologies: impact on product attributes, Boca Raton, FL: CRC Press, 2017

Supplementary

Hui, Y.H., Handbook of Food Products Manufacturing, John Wiley & Sons, Inc, 2007

Fellows, P.J., Food Processing Technology:Principles and Practice, Elsevier Science, 2016