



Module Description Postharvest Physiology and Technology

Module designation	Postharvest Physiology and Technology
Module code	23G03131802
Semester(s) in which the module is taught	4 th semester
Person responsible for the module (lecturers)	❖ Prof. Dr. Ir. Mulyati Muhammad Tahir, MS. ❖ Prof. Ir. Andi Dirpan, STP., M.Si., Ph.D. ❖ Dr. Adiansyah, STP.,M.Si. ❖ Prof. Dr. Andi Nurfaidah Rahman, STP., M.Si.
Language	Indonesian language
Relation to curriculum	Compulsory course
Teaching methods	Lecture
Workload	Total workload (estimated): ☐ 27 hours of lecture ☐ 32 hours of exercise ☐ 32 hours of independent study
Credit points	2 credit points = 3.24 ECTS
Required and recommended prerequisites for joining the module	Food Chemistry
Module objectives/ Intended Learning Outcomes (ILO)	ILO 8. Conducts chemical and physical analysis of food to support quality management and control, including food products for special dietary purposes (C5)
	CLO 1. Able to conceptually apply pre-harvest and post-harvest biochemical changes CLO 2. Able to implement factually the application of post-harvest technology for Fruit and Vegetables
Content	Philosophy and post-harvest; scope of physiology and post-harvest; definition, scope and factors that play a role during respiration and transpiration; definition, benefits and effects of ethylene during ripening and after harvest; chemical changes during cooking; physiological changes during ripening; Effect of temperature on the composition of fruit and vegetables during storage, Cooling; Water and moisture loss in the process processing; growth and harvest regulator; physiological damage;



	fruit and vegetable storage; Quality Evaluation and post-harvest packaging																														
Examination form	Writing (essay)																														
Study and examination requirements	Examination requirements: Attendance above 80% ❖ Individual tasks 12% ❖ Presentation 29% ❖ Midterm exam 6% ❖ Case study 53% Grading: <table><tr><th>Numerical range</th><th>Letter grade</th><th>Conversion value</th></tr><tr><td>85 - 100</td><td>A</td><td>4.00</td></tr><tr><td>80 - < 85</td><td>A-</td><td>3.75</td></tr><tr><td>75 - < 80</td><td>B+</td><td>3.50</td></tr><tr><td>70 - < 75</td><td>B</td><td>3.00</td></tr><tr><td>65 - < 70</td><td>B-</td><td>2.75</td></tr><tr><td>60 - < 65</td><td>C+</td><td>2.50</td></tr><tr><td>50 - < 60</td><td>C</td><td>2.00</td></tr><tr><td>40 - < 50</td><td>D</td><td>1.00</td></tr><tr><td>< 40</td><td>E</td><td>0.00</td></tr></table> <i>If student(s) receives(s) a score below 40, student(s) must retake the course</i>	Numerical range	Letter grade	Conversion value	85 - 100	A	4.00	80 - < 85	A-	3.75	75 - < 80	B+	3.50	70 - < 75	B	3.00	65 - < 70	B-	2.75	60 - < 65	C+	2.50	50 - < 60	C	2.00	40 - < 50	D	1.00	< 40	E	0.00
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< 40	E	0.00																													
Reading list	1. BPOM. 2006. Natural Toxins in Food Plants. http://www.pom.go.id/mobile/index.php/view/berita/157/RA_CUN-ALAMI-PADA-FOOD-PLANTS.html. 2. Sudjatha, Ni Wayan W. 2017.Textbook of Post-Harvest Physiology and Technology (Fruit and Vegetables). Udayana University Press. Denpasar. 3. Hiola, S.K.Y. 2018.Vegetable Processing Technology. CV. Inti Mediatama. Makassar.																														
Date of last amendment	15 July 2025																														