



Module Description Food Packaging Technology

Module designation	Food Packaging Technology
Module code	23G03130802
Semester(s) in which the module is taught	5 th semester
Person responsible for the module (lecturers)	❖ Prof. Ir. Andi Dirpan, S.TP., M.Si, Ph.D. ❖ Prof. Dr. Ir. Abu Bakar ❖ Prof. Dr. Ir. Jumriah Langkong, MP ❖ A. Hermina Julyaningsih, S.TP., M.Si.
Language	Indonesian language
Relation to curriculum	Compulsory course
Teaching methods	Lecture Group Discussion
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 Processing and Preservation Technology
Module objectives/ Intended Learning Outcomes (ILO)	ILO 9. Exhibits advanced skills in food technology from post-harvest handling, food processing, packaging, to food product development (C6) CLO 1. Students are able to explain the concept of packaging in providing food products CLO2. Students are able to explain the function, classification and properties of packaging materials
Content	❖ Function and Classification of Packaging ❖ The Influence of Packaging on the Quality and Shelf Life of Food Ingredients ❖ Characteristics of packaging materials, quality requirements and packaging standards ❖ Technology in Packaging ❖ Graphic design and packaging design.
Examination form	Writing (essay)



Study and examination requirements	Examination requirements: Attendance above 80% ☐ Problem based learning: 25% ☐ Presentation: 25% ☐ Case study: 25% ☐ Individual assignment: 10% ☐ Project: 15% 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. Gordon, L. R. (2016). <i>Food Packaging: Principles and Practice</i> (3rd ed.). Boca Raton: CRC Press, Taylor & Francis Group. 2. Cahyadi, W. (2007). <i>Karakteristik dan Sifat Berbagai Material Kemasan</i>. [Modul/Makalah]. Institut Pertanian Bogor. 3. Dirpan, A., Ainani, A. F., & Djalal, M. (2023). A review on biopolymer-based biodegradable film for food packaging: trends over the last decade and future research. <i>Polymers</i>, 15(13), 2781. 4. Adiansyah, Dirpan, A., Langkong, J., & Rahman, A. N. F. (2024). Karakterisasi dan uji fungsional edible film komposit berbasis polisakarida/protein dengan penambahan <i>rice bran oil</i> sebagai kemasan aktif (<i>active packaging</i>). <i>Laporan Penelitian Dosen Unhas</i> (Tersedia di SINTA/Repositori Unhas). 5. Dirpan, A., Djalal, M., & Kamaruddin, I. (2022). Application of an Intelligent Sensor and Active Packaging System Based																														



	on the Bacterial Cellulose of <i>Acetobacter xylinum</i> to Meat Products. <i>Sensors</i>, 22(2), 544 6. Julyaningsih, A. H., Latief, R., & Dirpan, A. (2020). The making of smart and active packaging on tuna fillet. <i>IOP Conference Series: Earth and Environmental Science</i>, 486(1), 012053. 7. Julyaningsih, A. H., Hamdani, I. M., & T Binalopa. (2024). Pelatihan Penyusunan Strategi Pengembangan Produk dan Metode Pengemasan pada UMKM Wanita Maju Bersama. <i>Jurnal ATIM</i>, 3(2). 8. Julyaningsih, A. H., & Hamdani, I. M. (2025). Penentuan Aspek Utama dalam Mendesain Kemasan Tabaro Dange Khas Luwu Menggunakan Analytical Hierarchy Process (AHP). <i>Jurnal Agritechno</i>, 18(1), 39–48.
Date of last amendment	28 July 2025