



BACHELOR IN FOOD & AGRICULTURAL PRODUCT TECHNOLOGY

Jl. Flora No. 1, Bulaksumur, Yogyakarta, Indonesia, 55281

Telp : +62 274 549650

Email : tphp@ugm.ac.id

Website : <https://s1tphp.ugm.ac.id/>

MODULE HANDBOOK MEAT AND FISH TECHNOLOGY

Module designation	Meat and Fish Technology
Module code	TPHP212110
Module level	Bachelor
Semester(s) in which the module is taught	Semester 3 / Odd Semester
Person responsible for the module	Dr. Manikharda, S.T.P., M.Agr. Prof. Dr. Ir. Sri Raharjo, M.Sc. Dr. Rini Yanti, S.T.P., M.P.
Language	Indonesian
Relation to curriculum	Elective Courses
Teaching methods	Case-based learning
Workload (incl. contact hours, self-study hours)	- Lectures 2 credits x 50 minutes x 16 meetings = 1600 minutes = 26.67 hours = 26.67 hours/30 hours = 0.89 ECTS - Structured Assignments 2 credits x 60 minutes x 16 meetings = 1920 minutes = 32 hours = 32 hours/30 hours = 1.07 ECTS - Self-study 2 credits x 60 minutes x 16 meetings = 1920 minutes = 32 hours = 32 hours/30 hours = 1.07 ECTS Total workload = 3.03 ECTS (90.67 hours)
Credit points	2 credits / 3.03 ECTS



Required and recommended prerequisites for joining the module	No requirement needed			
Module objectives/intended learning outcomes	Programme Learning Outcome (PLO)			
	PLO P4	Be able to use the principles of food engineering, food preservation and processing, packaging materials and methods, cleaning and sanitation, and water and waste management		
	Module Learning Outcome (MLO)			
	MLO P4.23	Be able to explain the sources and variability of raw materials and their effects on food processing operations		
	MLO P4.26	Be able to explain the effects of preservation and processing on product quality		
Content	1. Biochemical changes during post mortem in meat and meat quality 2. External and internal factors affecting the presence of spoilage and pathogenic microbial contamination, and how to control them in meat and fish. 3. Food additives to produce value-added meat and fish products 4. Processing of meat and fish by means of size reduction, reshaping, and battered & breaded products (sausages, meatballs, nuggets, etc.) 5. Preservation of meat and fish products by cooling and freezing; Canning of meat and fish; Preservation of meat and fish products by drying and smoking; Processing of fish in the form of surimi and its derivatives 6. Utilization of by-products from meat and fish processing 7. Current issues related to the production and consumption of meat and fish products in terms of health, food safety, and sustainability (environment)			
Examination forms	Evaluation Base	Evaluation Components	MLO	Percentage
	A. Participatory Activities	Discussion		
	B. Case Study Results	Presentation		
		Report		
		Midterm Exam	MLO P4.23, MLO P4.26	30%
		Final Exam	MLO P4.23, MLO P4.26	30%
	C. Cognitive	Skill-Based Assessment (SBA)		



		Quiz		
		Midterm Exam	MLO P4.23, MLO P4.26	20%
		Final Exam	MLO P4.23, MLO P4.26	20%
		Total		100%
Study and examination requirements	The final grade in the module is composed of (60% project results and 40% cognitive). Students must attend 75% of the total meetings to take the exam.			
Reading list	Main: 1. Barbut, S. 2002. Poultry product processing: An industry guide. CRC Press. 2. Venugopal, V. 2006. Seafood processing. Taylor and Francis Group. 3. Heinz, G. and Hautzinger, P. 2007. Meat processing technology. FAO RAP Publication. Addition: 1. Standards and regulations related to meat, poultry, fish, seafood, and their by-products 2. Youtube			
Last Modified	July 31 st , 2024			