



Course Module
Department of Animal Science
Faculty of Animal Science
Universitas Brawijaya

Module Name	Animal Products Technology
Module Level	Undergraduate Study Program of Animal Science
Code	PET60006
Subtitle	-
Courses	Animal Products Technology
Semester (s)	5
Person responsible for the module	Dr. Imam Thohari, S.Pt.,MP., IPM
Lecturer	<ol style="list-style-type: none"> 1. Prof. Dr. Ir. Lilik Eka Radiati, MS., IPU. 2. Prof. Dr. Ir. Djalal R, MS., IPU., ASEAN Eng. 3. Dr. Khotibul Umam A, S.Pt., M.Si. 4. Dr. Ir. Imam T, MP, IPM, ASEAN Eng. 5. Dr. Agus Susilo, S.Pt., MP, IPM, ASEAN Eng. 6. Dr. Ir. Purwadi, MS. 7. Dr. Ir. Mustakim, MP., IPM. 8. Dr. Ir. Manik Erry Sawitri, MP. 9. Dr. Herly Evanuarini, S.Pt., MP. 10. Dr. Abdul Manab, S.Pt, MP. 11. Dr. Dedes Amertaningtyas, S.Pt, MP. 12. Dr. Premy Puspitawati R, S.Pt, MP 13. Ria Dewi Andriani, S.Pt, M.Sc 14. Mulia Winirsya Apriliyani, S.Pt, MP
Language	Indonesian language and English
Relation to Curriculum	Study Program: Animal Science Specialization: Animal Science Type: Compulsory
Type of Teaching, Contact Hours	Lecture: 100 minutes/meeting Independent Study: 150 minutes/meeting
Workload	Course 90.67 hours/semester Practical 42.50 hours/semester Lecture: 14 meetings*100 minutes Independent Study: 16 meetings*150 minutes
Credit points	Course 2 credits or 3.40 ECTS Practical 1 credits or 1.70 ECTS
Requirements According to the Examination Regulations	Attendance > 80% Final Score > 44 The final score component: <ol style="list-style-type: none"> 1) Midterm Exam 25% 2) Final Exam 25% 3) Practical 25% 4) Assignments 15%



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	5) Quiz 5% 6) Activeness 5%
Recommended Prerequisite	Introduction to Animal Product Technology, Animal Product Handling
Module Objectives / Intended Learning Outcomes	<ul style="list-style-type: none"> • Capability to analyse the development and implementation of technology through humanities, ethical and scientific value as to provide appropriate solutions and ideas (LO 5) • Demonstrating good capability to be independent and to work in team as to identify and analyse problems (LO 11) • Capability to implement technology in Animal Science to increase productivity, efficiency, quality and sustainability based on breeding, nutrition, processing, management as well as to organize an entrepreneurship concept and a sustainable production system (LO 13)
	Objectives: The objective of Animal Product Technology Course is to discuss technology and changes in raw materials into food and non-food materials in all commodities including milk, meat, eggs, by-products and honey using technology applications
	Knowledge: Able to recognize and apply the technology in processing and preserving of animal food product
	Skills Cognitive able to understand and recognize the technology in processing and preserving animal products Physicomotoric able to evaluate the process and quality of processed animal products
	Competences <ol style="list-style-type: none"> 1. Able to recognize and comprehend technology in processing and preserving animal products 2. Able to apply technology in the processing of animal products 3. Able to evaluate the process and quality of processed animal products 4. Able to work in groups and convey ideas/notions
Content	Scope of teaching material <ol style="list-style-type: none"> 1. Intermediate Moisture Meat 2. Restructured Meat 3. Meat smoked and Indigenous Product 4. Fermented Meat 5. Dairy Products using Heat Processing Technology



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	6. Dairy Products using Cold and Frozen Processing Technology 7. Dairy Products using Fermentation Technology and Traditional Milk Products 8. Dairy Products using Drying Technology 9. Products Processed using Eggshells 10. Products Processed without Using Egg Shells 11. Modern Technology and Traditional Egg Processing 12. Processing of Animal Skins and By-Products for Food 13. Processing of Animal Skins and By-Products for Non-Food 14. Processed Products of Beverages Honey, Crystallized Honey, Royal Jelly, Bee Pollen, Propolis
Study and Examination Requirements and Forms of Examination	<ul style="list-style-type: none"> - Examination requirements: A minimum attendance of 80% to take the Final Exam - The forms of the test: Multiple Choices/Essay/Group <p>The final score component:</p> <ul style="list-style-type: none"> 1) Midterm Exam 25% 2) Final Exam 25% 3) Practicum 25% 4) Assignments 15% 5) Quiz 5% 6) Activeness 5% <p>A : 80 < Final Score ≤ 100 B+ : 75 < Final Score ≤ 80 B : 69 < Final Score ≤ 75 C+ : 60 < Final Score ≤ 69 C : 55 < Final Score ≤ 60 D : 50 < Final Score ≤ 55 D+ : 44 < Final Score ≤ 50 E : 0 < Final Score ≤ 44</p>
Media Employed	Projector and screens, Zoom application, Google Classroom, e-book, WA Group
Reading List	<ol style="list-style-type: none"> 1. Thohari, I., Padaga, M., Mustakim, Rahayu, P.P. 2017. Buku Ajar Teknologi Hasil Ternak. UB Press. Malang. 2. Journal of Milk and Food Technology: Official Bimonthly Publication of the International Association of Milk Sanitarians, Volume 12. 3. G Feiner. 2006. Meat Products Handbook - 1st Edition. Woodhead Publishing. 4. Varnam, A., Sutherland, J.M. 1995. Meat and Meat Products: Technology, Chemistry and Microbiology. Springer US.



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	<ol style="list-style-type: none">5. William J Stadelman, Debbie Newkirk, Lynne Newby. 1995. Egg Science and Technology, Fourth Edition. CRC Press.6. NIIR Board of Consultants Engineers. 2011. Leather Processing & Tanning Technology Handbook: How to Start Leather Production, Processing & Tannery Business, Leather bag business plan, Leather Based Small Scale Industries Projects, Leather business Ideas, Leather Export Business Ideas, Leather Making Small Business Manufacturing, Leather. Niir Project Consultancy Services, 2011.7. Baglio, Ettore. 2018. Chemistry and Technology of Honey Production. Springer International Publishing.
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