

Module Descriptions “Compulsory BAS”

Module designation	<i>PTK61128 Quality and Safety of Animal Products</i>
Semester(s) in which the module is taught	3
Person responsible for the module	1. <i>Dr. Indri Juliyarsi, S.P., M.P</i> 2. <i>Dr. Sri Melia, S.TP., M.P</i> 3. <i>Deni Novia, S.P., M.P</i> 4. <i>Afriani Sandra, S.Pt., M.Sc</i> 5. <i>Aronal Arief Putra, S.Pt., M.Sc, Ph.D</i> 6. <i>Dr. Ely Vebriyanti, S.Pt., M.P</i> 7. <i>Ade Rakhmadi, S.Pt., M.P</i> 8. <i>Ade Sukma, S.Pt., M.P., Ph.D</i> 9. <i>Rizki Dwi Setiawan, S.Pt., M.Sc.</i>
Language	<i>Indonesia</i>
Relation to curriculum	<i>Compulsory</i>
Teaching methods	<i>Lecture, lesson (small group discussion).</i>

Workload (incl. contact hours, self-study hours)	<i>(Estimated) Total workload: 136.01 hours</i> <i>Contact hours: 39.97 hours (lecture)</i> <i>Private study including examination preparation, specified in hours: 96.04 hours</i>
Credit points	<i>4.53 ECTS</i>
Required and recommended prerequisites for joining the module	-

Module objectives/intended learning outcomes	<i>ILO 2 : Mastering the fundamental general knowledge and basic theories in the field of animal science.</i> <i>PI-4: Mastering the basic concepts in the field of animal product technology</i> <i>ILO 4 : Able to identify, formulate, provide solutions, and evaluate the solutions given to problems in the field of animal science.</i> <i>PI-1: Able to identify problems in the field of animal science.</i> <i>PI-3: Able to apply solutions to problems in the field of animal science.</i> <i>PI-4: Able to evaluate the results of solutions implemented in the field of animal science.</i> <i>Course Learning Outcomes:</i> <i>1. Students are able to explain quality principles and analyze the quality of animal-derived food products.</i> <i>2. Students are able to study and independently develop (self-learn) various methods of quality and food safety systems for animal-derived food products</i> <i>3. Students are able to explain quality control methods and evaluate whether a business meets the criteria for quality control by visiting SMEs through Project-Based Learning.</i> <i>4. Students have the ability to work in teams, engage in discussions, and demonstrate high creativity/hard skills.</i> <i>5. Students are able to explain various types of certification that must be fulfilled by small, medium, and large industries.</i>
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Content	<i>This course studies how to conduct quality control and quality supervision of processed livestock products, starting from raw materials to finished products. In this course, the criteria of ASUH products are also explained, as well as quality classification. Furthermore, various quality control methods are introduced, including Standard Sanitation Operational Procedures (SSOP), Good Manufacturing Practices (GMP), and Hazard Analysis Critical Control Points (HACCP), as well as the halal concept and certification of livestock product quality.</i>
Examination forms	<i>Tasks, quiz, mid-term exam, and final exam.</i>
Study and examination requirements	1. <i>Tasks : 20%</i> 2. <i>Quiz : 24%</i> 3. <i>Mid Test Semester : 26%</i> 4. <i>Final Test Semester : 30%</i>

Reading list	1. Nielsen, S.S. 2010. <i>Food Analysis. 4th Edition of Food Science Text Series. Springer</i> 2. Yadav, V. 2005. <i>Food Analysis and Quality Control. Government Polytechnic. India</i> 3. Winarno, F.G. 2002. <i>HACCP and Its Application in the Food Industry. M-Brio Press. Bogor</i> 4. Mamat, M.Z., Musa, N.Z., and Hasbullah, M. 2017. <i>Institutionalization of the Halal Industry in Malaysia and Thailand: A Preliminary Study. Sejong University. South Korea</i> 5. Food and Drugs Administration. 2022. <i>Bacteriological Analytical Manual (BAM). United States</i> 6. Trienekens, J., and Zuurbier, P. 2008. <i>Quality and Safety Standards in the Food Industry: Developments and Challenges. International Journal of Production Economics. 113: 107–122</i> 7. Savov, A.V., and Kouzmanov, G.B. 2009. <i>Food Quality and Safety Standards at a Glance. Biotechnology and Biotechnological Equipment. United Kingdom</i> 8. Ramos, L. 2020. <i>Chemical Analysis of Food: Basics and Advances in Sampling and Sample Preparation</i> 9. Hermawati, D. 2000. <i>Quality Testing of Livestock Products. Inofet Magazine. Vol. 7, December 2000</i> 10. <i>Law of the Republic of Indonesia Number 18 of 2012 concerning Food, enacted in Jakarta on November 16, 2012</i> 11. Sugiono. 2004. <i>Food Chemistry. Faculty of Engineering, Yogyakarta State University</i>
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	Module Description/Course Syllabi Study Programme : Bachelor Animal Sciences Faculty of Animal Sciences Universitas Andalas
1. Course number and name	
PTK62127 Quality and Safety of Animal Products	
2. Credits and contact hours/Number of ECTS credits allocated	
3 SKS/ 4,53 ECTS	
3. Instructors and course coordinator	
1. Drh. Yuherman, M.S., Ph.D; 2. Dr. Indri Juliyarsi, S.P., M.P; 3. Dr. Sri Melia, S.TP., M.P; 4. Deni Novia, S.P., M.P; 5. Afriani Sandra, S.Pt., M.Sc; 6. Aronal Arief Putra, S.Pt., M.Sc., Ph.D; 7. Dr. Ely Vebriyanti, S.Pt., M.P; 8. Ade Rakhmadi, S.Pt., M.P; 9. Ade Sukma, S.Pt., M.P., Ph.D; 10. Rizki Dwi Setiawan, S.Pt., M.Sc.	
4. Text book, title, author, and year	
1. Nielsen, S.S. 2010. Food Analysis. 4th Edition of Food Science Text Series. Springer	
5. Recommended reading and other learning resources/tools	
1. Yadav, V. 2005. Food Analysis and Quality Control. Government Polytechnic. India; 2. Winarno, F.G. 2002. HACCP and Its Application in the Food Industry. M-Brio Press. Bogor; 3. Mamat, M.Z., Musa, N.Z., and Hasbullah, M. 2017. Institutionalization of the Halal Industry in Malaysia and Thailand: A Preliminary Study. Sejong University. South Korea; 4. Food and Drugs Administration. 2022. Bacteriological Analytical Manual (BAM). United States; 5. Trienekens, J., and Zuurbier, P. 2008. Quality and Safety Standards in the Food Industry: Developments and Challenges. International Journal of Production Economics. 113: 107–122; 6. Savov, A.V., and Kouzmanov, G.B. 2009. Food Quality and Safety Standards at a Glance. Biotechnology and Biotechnological Equipment. United Kingdom; 7. Ramos, L. 2020. Chemical Analysis of Food: Basics and Advances in Sampling and Sample Preparation; 8. Hermawati, D. 2000. Quality Testing of Livestock Products. Inofet Magazine. Vol. 7, December 2000; 9. Law of the Republic of Indonesia Number 18 of 2012 concerning Food, enacted in Jakarta on November 16, 2012;	

10. Sugiono. 2004. Food Chemistry. Faculty of Engineering, Yogyakarta State University;
11. Rochmawati, N. 2019. Food Science and Sensory Analysis. Ottimmo International Master Gourmet Academy. Surabaya, Indonesia.
6. Specific course information
A. Brief description of the content of the course (catalog description)
This course studies how to conduct quality control and quality supervision of processed livestock products, starting from raw materials to finished products. In this course, the criteria of ASUH products are also explained, as well as quality classification. Furthermore, various quality control methods are introduced, including Standard Sanitation Operational Procedures (SSOP), Good Manufacturing Practices (GMP), and Hazard Analysis Critical Control Points (HACCP), as well as the halal concept and certification of livestock product quality.
B. Prerequisites or co-requisites
PT125 Animal Product Technology
C. Indicate whether a required or elective course in the program
Required
D. Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)
First Cycle Bachelor
E. Year of study when the course unit is delivered (if applicable)
1st Year
F. Semester when the course unit is delivered
Even semester

G. Mode of delivery (face-to-face, distance learning)
Face to face
7. Intended Learning Outcomes
ILO 2 : Mastering the fundamental general knowledge and basic theories in the field of animal science.
PI-4: Mastering the basic concepts in the field of animal product technology

ILO 4 : Able to identify, formulate, provide solutions, and evaluate the solutions given to problems in the field of animal science. PI-1: Able to identify problems in the field of animal science. PI-3: Able to apply solutions to problems in the field of animal science. PI-4: Able to evaluate the results of solutions implemented in the field of animal science.
8. Course Learning Outcomes <i>ex. The student will be able to explain the significance of current research about a particular topic.</i>
1. Students are able to explain quality principles and analyze the quality of animal-derived food products. 2. Students are able to study and independently develop (self-learn) various methods of quality and food safety systems for animal-derived food products 3. Students are able to explain quality control methods and evaluate whether a business meets the criteria for quality control by visiting SMEs through Project-Based Learning. 4. Students have the ability to work in teams, engage in discussions, and demonstrate high creativity/hard skills. 5. Students are able to explain various types of certification that must be fulfilled by small, medium, and large industries.
9. Brief list of topics to be covered
Quality and safety of ASUH animal products; definition of quality; quality classification (physical, chemical, microbiological, and sensory); basic considerations for determining quality grades of animal products; deterioration and quality decline of animal-derived food products; quality standardization; quality control and food safety programs for animal products (SSOP, GMP, HACCP); halal concept; certification of animal product quality (PIRT, BPOM, Halal, ISO).
10. Learning and teaching methods
Small group discussion, Directed Learning
11. Language of instruction
Bahasa Indonesia
12. Assessment methods and criteria
Summative Assessment : 1. Tasks : 20% 2. Quiz : 24% 3. Mid Test Semester : 26% 4. Final Test Semester : 30% Formative Assessment : -

