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

Module Name	Quality Control and Assurance
Module Level	Undergraduate Study Program of Animal Science
Code	PET60011
Subtitle	-
Courses	Quality Control and Assurance
Semester (s)	5
Person responsible for the module	Prof. Dr.Ir. Lilik Eka Radiati MS.
Lecturer	1. Prof. Dr.Ir. Lilik Eka Radiati MS. 2. Dr. Ir. Purwadi, MS. 3. Prof. Dr. Ir. Djalal Rosyidi, MS 4. Dr. Ir. Imam Thohari, MP. 5. Dr. Agus Susilo, S.Pt., MP. 6. Dr. Ir. Mustakim, MP. 7. Dr. Khotibul Umam Al-Awwaly, S.Pt., M.Si. 8. Dr. Ir. Manik Erry Sawitri, MP. 9. Dr. Abdul Manab, S.Pt, MP 10. Dr. Herly Evanuarini, SPt., M.P. 11. Dr. Dedes Amertaningtyas, S.Pt, MP 12. Dr. Premy Puspitawati Rahayu, 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: 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	• Capability to analyse the development and implementation of technology through humanities, ethical and scientific value as to provide appropriate solutions and ideas (LO 5) • Proficient in biology, physiology, animal nutrition, breeding, farm management, and implementation in Animal Science (LO 6) • Capability to perform an independent, standardization, measurable, effective, efficient and sustainable work (LO 7).
	Objectives: The objective of Quality Control and Assurance course are to understand the quality, classification, quality components, quality policies, including codex, ISO-9000, SNI, and GMP (Good Manufacturing Practices), Assessment of permissible (halal), expired, organoleptic food quality control and quality control of types of raw materials and processed products.
	Knowledge: Able to recognize and understand the quality management system and standardization in the field of animal science
	Skills Cognitive able to understand the standardization and management system in animal science Phsycomotoric able to analyze the application of HACCP and compilation of quality assurance plan
	Competences 1. Know and understand the quality standardization in the field of animal science 2. Understand the quality management system including ISO 9000, IS0 14000, and ISO 22000 3. Analyze the application of Hazard Analysis Critical Control Point (HACCP) and monitoring the HACCP system. 4. Provide skills in making the Compilation of Quality Assurance Plans and compiling ISO documents.
Content	Scope of teaching material 1. Development of the quality system 2. Indonesian National Standard (SNI) 3. Veterinary Control Number (VCN) 4. Quality management system - SNI ISO 9001:2015

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	5. Environmental management system - ISO 14000 6. Food safety management system - ISO 22000 7. Permissible (halal) product guarantee system 8. Determining the shelf life
Study and Examination Requirements and Forms of Examination	– Examination requirements: A minimum attendance of 80% to take the Final Exam – The forms of the test: Multiple Choices/Essay/Group The final score component: 1) Midterm Exam 25% 2) Final Exam 25% 3) Practicum 25% 4) Assignments 15% 5) Quiz 5% 6) Activeness 5% 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
Media Employed	Projector and screens, Zoom application, VLM, Google Classroom, e-book, WA Group
Reading List	1. British Retail Consortium (BRC) Global Standard for Food Safety: Issue 5. TSO. Norwich, United Kingdom. 2. Mudambi, S.R., S.M. Rao and M.V. Rajagopal. 2006. Food Science. New Age International Publishers. Newdelhi. 3. Toldra, F. 215. Handbook of Fermented Meat and Poultry. 2nd Ed. Wiley Blackwell. UK. 4. Arvanitoyannis, I.S., 2009. HACCP and ISO 22000 Application to Food of Animal Origin. First Edition. Wiley Blackwell. USA 5. Pieternel A. Luning, W. J. Marcelis, W. M. F. Jongen. 2002. Food Quality Management: A Techno-managerial Approach. Wageningen Academic Publishers, 2002 - 323 page. 6. Dhanasekharan Natarajan. 2017. ISO 9001 Quality Management Systems (Management and Industrial Engineering) 1st ed. 2017 Edition Springer. 7. Bizmanualz. 2008. ISO 22000 Standard Procedures for Food Safety Management Systems. Bizmanualz, Inc. 392 page.

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