



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

Module name	Dairy Production
Module level	Undergraduate Program
Code	PEP61003
Subtitle	-
Courses	-
Semester(s)	3
Person responsible for the module	
Lecturer	<ol style="list-style-type: none"> 1. Dr. Ir. Tri Eko Susilorini, MS., IPM 2. Dr. Ir. Puguh Surjowardojo, MP 3. Dr. Tri Eko Susilorini, MP 4. Firmansyah Tri Syahputra, S.Pt., MP., M.Sc 5. Aswah Ridhowi, S.Pt., MP., M.Sc
Language	Indonesian and English
Relation to curriculum	Compulsory/ Elective
Type of teaching, contact hours	Contact hours and class size separately for each teaching method: course, structured assignment, practical etc.
Workload	Course: 90.67 hours/semester Practical: 42.50 hours/semester
Credit points	3 (2-1) SKS / 5.1 (3.40-1.70) ECTS
Requirements according to the examination regulation	-
Recommended prerequisites	Introduction to Animal Science, Anatomy and Physiology
Module objectives/intended learning outcomes	<p>ILO-3: Developing awareness of Animal welfare and halal issue</p> <p>ILO-5: Capability to analyse the development and implementation of technology through humanities, ethical and scientific value as to provide appropriate solutions and ideas</p> <p>ILO-6: Proficient in biology, physiology, animal nutrition, breeding, farm management, and implementation in Animal Science</p> <p>ILO-10: Actively contributing in the learning process and discussion</p>
	Objectives: This course consists the business potential and development of dairy cattle, dairy breeds, the environmental adaptability of various dairy breeds, the components of milk and the nutritional value of milk as a human food ingredient, the physical and chemical properties of milk,

	lactation biology, milk biosynthesis, factors affecting milk production and quality as well as lactation dynamics.
	Knowledge: Able to identify various types of dairy cattle
	Skills: cognitive- Able to explain animal production systems that are suitable to be applied to certain regional conditions and provide benefits to farmers and the environment. Physicomotoric- Able to check the quality of fresh milk physically, chemically and organoleptically, and able to mention and explain the factors that affect the quantity and quality of dairy cattle production
	Competences: Able to analyze the dairy animal production system to increase the productivity of dairy animals
Content	<p>Courses:</p> <ol style="list-style-type: none"> 1. Introduction 2. Business Potential and Dairy Animal Development 3. Dairy Animal Strains 4. Adaptation Ability of the Environment of Various Dairy Animal Strains 5. Components and Nutritional Value of Milk as Human Food Ingredients 6. Physical and Chemical Properties of Milk 7. Lactation Biology 8. Milk Biosynthesis 9. Factors Affecting Dairy Animal Milk Production 10. Lactation Dynamics
Study and examination requirements and forms of examination	<ol style="list-style-type: none"> 1. Midterm exam 2. Final term exam 3. Practical 4. Structured assignment <p>How to score</p> <ul style="list-style-type: none"> - Midterm exam 30% - Final term exam 30% - Practical 30% - Structured assignments 10% <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	1. Campbell, R.S and R.T.Marshall, 1975, The Science of Providing Milk for Man, Mc.Graw-Hill Book Company, New York.

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| | <ol style="list-style-type: none">2. Chamberlain.A., 1989, Milk Production in the Tropics, Longman Group. U.K. Limited, Kualalumpur.3. Davis, R.F, 1962, Modern Dairy Cattle and Production, 4th Edition, Prentice Hall Inc Engle Wood Clifft.4. Foley, R.C., D.C. Bath, F.N. Dickinson, and H.A Tucker, 1985 Dairy Cattle, Principles, Practices, Problem, Profit, Lea, and Febiger, Philadelphia.5. Gibbons, J.M, 1963, Disease of Cattle, Second ed, American Veterinary Publication Inc, Drawer K.K. Santa Barbara, California.6. Quint, T., 1980, Dairy Farm Management, Litton Education Publishing Inc, New York, USA.7. Rice, V.A, R.N Andrew, E.J Warwick and J.E Ligatea, 1971, Breeding and Improvement of Farm Animal, TATA MC Graw-hill Publishing Co. Ltd, New Delhi.8. Schmidt, 1971, Biology of Lactation, W.H Freeman and Company, San Francisco9. Schmidt and Van Vleck, L.D., 1974, Principle of Dairy Science Freeman, W.H and Company, San Francisco.10. Webster, J., 1987, Understanding Dairy Cow, Billing and Sins Ltd, Worcester. |
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