

Module Handbook

Modul Name	Animal Feed and Nutrition Science
Modul Level	1 (Bachelor)
Abbreviation, if applicable	NUV101
Sub-heading, if applicable	
Courses included in the module, if applicable	
Semester/term	2/1
Module coordinator(s)	Dr. M. Anam Al-Arif, drh., MP.
Lecturer(s)	1. Dr. M. Anam Al-Arif, drh., MP. 2. Prof. Dr. Mirni Lamid, drh., MP. 3. Dr. Widya Paramita Lokapirnasari, drh., MP.
Language	Bahasa Indonesia and English
Classification within the curriculum	Compulsory/ elective course
Teaching format/class hours per week during the semester	2 class hour lecture (2 x 170 minutes lecture) x 14 weeks
Workload per semester	340 minutes lecture is divided into 100 minutes face to face interaction, 100 minutes assignment, 140 minutes independent study.
Credit points	2 (lecture) (~3.02 ECTS)
Requirements	-
Learning goals/competencies	Students are able to explain various types of feed ingredients that make up rations, digestion & metabolism of animal feed and can formulate ruminant and non-ruminant ration formulas properly and correctly
Content	This material discusses the notions of food, nutrition, animal feed formulas, feed ingredients classification & nutritional value, digestion and metabolic processes, feed substance balance, feed requirements, calculating and compiling ration formulas with various methods in both ruminants and non ruminants
Softskills attribute	Ethics, written & communication or li
Study/exam achievements	Final exam (33.3%), midterm (22.2)%, assigment(16.7%), quizzes (16.7%), soft skill (11.1%)
Forms of media	Computer projector, white board, AULA (Airlangga University e-Learning Application)
Literatures	1. NRC. 1994. Nutrient Requirements of Poultry. 9 th ed. National Research Council. National Academy Press. Washington, DC. 2. NRC. 2000. Nutrient Requirements of Beef Cattle. 7 th revised ed. National Research Council. National Academy Press. Washington, DC.

	<p>3. NRC. 2001. Nutrient Requirements of Dairy Cattle. 7th revised ed. National Research Council. National Academy Press. Washington, DC.</p> <p>4. Chronje PB. 2000. Ruminant Physiology. Digestion, Metabolism, Growth and Reproduction. CABI Publishing, UK.</p> <p>5. Bonnier P, Maas A and Rijks J. 2004. Dairy Cattle Husbandry. Agromisa Foundation, Wageningen, Netherland.</p>
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