

# LECTURE CONTRACT

- **COURSE:**

**ANIMAL FEED AND NUTRIENT SCIENCE**

- **Course Code : NUV. 101**
- **SKS : 2 – 0**
- **SEMESTER : 2**

# SCHEDULE

- Class A : Thursday: 07.00 – 08.50 ; Room: 3A
- Class B : Thursday : 07.00 – 08.50 ; Room:4C
- Class C : Friday: 13.00 – 14.50 ; Room:4A
- Class D : Friday: 13.00 – 14.50. ; Room: 4 B
- Class E : Tuesday: 09.00 – 10.50. ; Room:  
International

# TASK COURSE

Group	Duration	Methods
<ul style="list-style-type: none"><li>• Make papers / references about rations for various sick animals and fulfill requirements</li></ul> <p>References:</p> <ul style="list-style-type: none"><li>• Textbook</li><li>• National Journal</li><li>• accreditate national journal</li><li>• International journal</li></ul>	4 weeks	<ul style="list-style-type: none"><li>• Presentation</li><li>• Submit papers / references about rations for various sick animals.</li><li>• arranged according to the type of animal / livestock and formulation of feed ingredients used along with their nutritional content.</li><li>• Compiled according to scientific rules for writing journal articles</li></ul>

# ASSESSMENT CRITERIA

- **Task** : x 1,5
- **Soft Skill** : x 1
- **Quis** : x 1,5
- **UTS** : x 2
- **UAS** : x 3

# STUDENT GRADUATION

- Submit Group Assignments after UTS to be presented
- UTS and UAS (kind of question in the form multiple choice)
- Students who did not take the exam (UTS or UAS) must report no later than 7 days after the Exam
- No Improvement Examination

# Rules

- Students must attend all scheduled evaluations starting from the Tasks, Mid Semester Exams (UTS) and Final Semester Exams (UAS)
- Students who are allowed to attend UAS if 75% of them are in college (min 9 times attendance, new students) and 50% attend (students who repeat lecture)
- If the students do not take the exam (quiz, UTS, UAS), there must be a doctor's certificate and maximum 1 week after quiz / UTS / UAS and immediately can follow up the test
- students must bring a student card during the exam

# **SEMESTER LEARNING PLAN**

# A. IDENTITY of COURSE

**1. Course: ANIMAL FEED AND NUTRIENT SCIENCE Course**

**Code: NUV -101**

**2. SKS : 2 sks (2/0)**

**3. Semester : II –GENAP**

**4. Study Program : Bachelor of Veterinary Medicine**

**5. Achievement of Graduate Learning :**

- Implement developing entrepreneurship skills in the field of veterinary and husbandry to be independent



# 6. Achievement of Course Learning

After following the course of Animal Feed and Nutrition Science, 2<sup>nd</sup> semester students FKH Unair know and can develop Animal Feed and Nutrition Science, which includes:

- Definition of Feed,
- Nutrition,
- Animal Feed Formula,
- Classification of Feed stuff & Nutritional Value
- Use of various animal feed ingredients,
- Process Metabolism & Digestion,
- Balance of Feed Substance,
- Feed requirement,
- Calculate and compile formulas ration with various methods for Ruminant and Non-Ruminant Livestock.

# 7. Course Description

- Animal Feed and Nutrition Science are delivered face-to-face discussing: Definition of Feed, Nutrition, Animal Feed Formula, Classification of Feed stuff & Nutritional Value and Use of various animal feed ingredients, Process Metabolism & Digestion, Balance of Feed Substance, Feed requirement, Calculate and compile formulas ration with various methods for Ruminant and Non-Ruminant Livestock.
- To find out the mastery of the material, group assignments were given which were evaluated by the assignment seminar.

- **PJMK : Dr. Widya Paramita Lokapirnasari, drh.,MP**

**Lecturer :**

- **Dr. Widya Paramita Lokapirnasari, drh.,MP**
- **Dr. M. Anam Al-Arif, drh.,MP**
- **Prof. Dr. Mirni Lamid, drh.,MP**

# B. PROGRAM PEMBELAJARAN

Week	Expected Final Ability	Topic of Study	Learning Method	Assesment Criteria and Indicator ( <i>hard and soft skills</i> )	Value Score
1	2	3	4	8	9
1	After attending this lecture, students able to understand the scope and the Rules of Animal Feed and Nutrition Science	Lecture Contract, Benefits lecturing, Description of lecturing, Class Schedule, assessment results, Reading Referens, Tasks are given	Tutorial and discussion	Understanding and agree	-
2	After attending this lecture, students able to explain Feed, ration, Nutrition and Classification of feed stuff	Understanding several terms in animal feed, Classification of feed stuff	Tutorial and discussion	Complete and correct identification	5
3	After attending this lecture, students able to explain	Nutritional Value and Use of Feed Ingredients	Tutorial and		5

	students able to explain Animal feed ingredients, non-conventional, anti-nutrient substance	ingredients, non-conventional. Various types of anti-Nutritive substances in feed stuff	discussion	correct identification	
5	After attending this lecture, students able to explain and identify of nutrition metabolism	Metabolism Nutrition: Carbohydrates, Lipids and Proteins in Ruminant	Tutorial and discussion	Complete and correct identification	5
6.	After attending this lecture, students able to explain and identify of nutrition metabolism	Metabolism Nutrition mineral dan Vitamin in Ruminant	Tutorial and discussion	Complete and correct identification	10
7	After attending this lecture, students able to explain and identify of nutrition metabolism	Metabolism Nutrition: Carbohydrates, Lipids and Proteins in Poultry	Tutorial and discussion	Complete and correct identification	10
8	Mid Semester Exam				

1	2	3	4	5	6
9	After attending this lecture, students able to explain and identify of nutrition metabolism	Metabolism Nutrition mineral and Vitamin in Poultry	Tutorial and discussion	Complete and correct identification	10
10	After attending this lecture, students able to explain and identify of nutrition metabolism	Metabolism Nutrition: Carbohydrates, Lipids, Proteins, minerals and vitamins in the Dogs and Cats	Tutorial and discussion	Complete and correct identification	10
11	After attending this lecture, students able to explain and identify of Nutrient requirement and Preparation of rations in dogs and cats	Nutrient requirement and Preparation of rations in Dogs and Cats	Tutorial and discussion	Punctuality of handing in the assignment, correct identification, eloquence	10

1	2	3	4	5	6
12	After attending this lecture, students able to explain nutrient requirement and Preparation of rations in ruminants	Nutrient requirement and Preparation of rations in Goat and Sheep	Tutorial and discussion	Punctuality of handing in the assignment, correct identification, eloquence	10
13	After attending this lecture, students able to explain nutrient requirement and Preparation of rations in ruminants	Calculation and Preparation of Rations with various methods for cattle Dairy Cattle and Beef Cattle	Tutorial and discussion	Punctuality of handing in the assignment, correct identification, eloquence	10
14	After attending this lecture, students able to explain nutrient requirement and Preparation of rations in Poultry	Calculation and Preparation of Rations with various methods for poultry	Tutorial and discussion	Punctuality of handing in the assignment, correct identification, eloquence	10

1	2	3	4	5	6
15	After attending this lecture, students able to explain poultry ration formulation	Ration formulation in various poultry	Tutorial and discussion	Punctuality of handing in the assignment, correct identification, eloquence	10
16	<b>End Semester Exam</b>	Topics for exams from lecture 1 s/d 7 is 25 % Topics for exams from lecture 8 s/d 13 is 75 %			



# TASK PLANNING

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**Course** : ANIMAL FEED AND NUTRIENT SCIENCE

**SEMESTER** : 2 sks : 2

**Week** : 9 - 14

: **Dr. Widya Paramita L,**

**Prof. Mirni Lamid,**

**Lecturer** **Dr. M. Anam Al-Arif,**

**TASK OBJECTIVES:** students able to explore, understand and explain and be able to present about Preparation of rations for Animals

## **2. DESCRIPTION OF TASK:**

a. Objects: Paper Creation Methods for ration preparation for Ruminant and Non Ruminant (sick animal)

**b.** What to do and limitations:

Chapter I: Definition of feed for ruminants and non ruminants

Chapter II: The method used to prepare rations

Chapter III: Making rations for ruminant and non ruminants

Chapter IV: Conclusions about rations that have been prepared

**c. Method / method of work, reference used:**

National Journal, accreditate national journal,  
International journal

**d. Output description:**

is a description of the form of study results / performance that must be shown / presented (eg the results of the study are presented in the paper including the scheme, tables and images, and may be equipped with a presentation in the form of a CD with powerpoint format). Which is in the form of paper and collection of papers produced

### **3. ASSESSMENT CRITERIA**

- a. Accuracy of understanding and reference completeness: 40%
- b. The accuracy of the sample object selected: 30%
- c. Quality of visual and oral presentations, collaborating: 30%

## 4. References :

- ADM Ingredients Catalog. Feed and Pet food. Archer Daniels Midland Company.
- Hari Hartadi, *et al.* 1997. Table of Animal Feed Composition for Indonesia
- Anggorodi, 1990. General animal nutrition;
- Tillman, *et al.*. 1989. Basic animal nutrition
- Ensminger *et al.*., 1990. Feeds and Nutrition,;
- Arora, 1989. Digestion of rumen microbes
- Kamal. 1986. Arranging livestock rations;
- Parakasi, 1999. Nutrition and ruminant feed science
- Wahyu, 1998. Kebutuhan Pakan Ternak Unggas .
- Dog Nutrient Requirements: New Knowledge. Veterinary Research Communications, 29(Suppl. 2) (2005) 35–38
- Nutrient Requirement of Dog and cat. 2006. The National Academies Press Todd J. Applegate and Roselina Angel. 2014..
- Nutrient requirements of poultry publication: History and need for an update. Poultry Science Association, Inc Nutrient
- Requirements of Poultry: Ninth Revised Edition, 1994. National Academies Press Nutrient
- Requirements of Beef Cattle: Eighth Revised Edition. Copyright © National Academy of Sciences.