

Course Description Form of Animal Nutrition

1. Course Name:	
Animal Nutrition	
2. Course Code:	
ANUT311	
3. Semester / Year:	
Second semester/ 2024-2025	
4. Description Preparation Date:	
15/1/2025	
5. Available Attendance Forms:	
Attending	
6. Number of Credit Hours (Total) / Number of Units (Total)	
5 hours (Theoretical & practical) 3.5 units	
7. Course Administrator's Name (Mention All, If More Than One Name)	
Name: Dr. Salah Mahdi Abed Email : salahabed@uodiyala.edu.iq	
8. Course Objectives	
Course Objectives: Graduating students who are able to:	Give an idea of the importance of animal nutrition * Idea of the mechanics of the digestive system of ruminants * The student learns about digestion, metabolism and absorption in ruminants * Knowledge of the nutrients involved in the composition of food and how to benefit from them.
9. Teaching and Learning Strategies	
Strategy	A 15 week attendance lectures, interspersed with two monthly exams, daily exams & reports.

10. Course Structure

Theoretical part					
Week	Hours	Required learning outcomes	Unit or Subject	Learning Method	Evaluation Method
1	2	Nutrition Sci., general rules in nutrition	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
2	2	Ingredients of the nutrient - water	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	2	Ingredients of nutrient - Carbohydrates	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
4	2	Ingredients of nutrient - protein	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
5	2	Ingredients of nutrient - Lipids	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
6	Semester 1 st exam				
7	2	Ingredients of nutrient - Vitamins	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
8	2	Ingredients of nutrient - Minerals	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
9	2	Anatomy and functions of the gastrointestinal tract	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
10	2	Digestion, absorption and Carbohydrate metabolism	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
11	2	Digestion, absorption and protein metabolism	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
12	2	Digestion, absorption and Lipid metabolism	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
13	Semester 2 nd exam				
14	2	Nutritional deficiency diseases	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
15	2	Sustainable production of animal diet	Animal nutrition	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports

Practical part					
Week	Hours	Required learning outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	3	How to work in the laboratory	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
2	3	Laboratory devices Important	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
3	3	Laboratory tests	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
4	3	Partial drying of the Diet	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
5	3	Total drying of the Diet	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
6	Semester 1st exam				
7	3	Ash percentage measurement	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
8	3	Ash percentage measurement	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
9	3	Fat percentage measurement	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
10	3	Fat percentage measurement	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
11	3	Protein percentage measurement	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
12	3	Protein percentage measurement	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
13	Semester 2nd exam				
14	3	Fiber percentage measurement	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
15	3	Sustainable animal diet industry	Animal nutrition	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
11. Course Evaluation					

Examination: Monthly & daily exams with discussion questions inside the lecture.
The degree of participation in the questions related to the subject.

12. Learning and Teaching Sources

Required Textbooks (Curricular Books, If Any)	Animal nutrition (McDonald-Edwards-krenhal) translated by (Saad Abdul Hussein Naji and Talal Youssef Boutros)-Ministry of higher education and scientific research.
Main References (Sources)	Principle of Animal Nutrition, Dr. Ali Abdul Karim Attar and Dr. Farouk Habib Gharib – University of Basra, Faculty of Agriculture .
Recommended Books and References (Scientific Journals, Reports...)	Iraqi academic journal
Electronic References, Websites	Websites