

VS109
Nutrition
3 Credits

Instructor: Melissa Hall
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Original Developer: Dr. Crystal Mullen

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Reviewer: Brianne Bellwood

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VS109 Version: 3



Nutrition

Calendar Description

This course provides a general overview of the basics of nutrition, digestion, feed components, and nutritional deficiencies of both monogastrics and ruminants. Students are exposed to small animal prescription diets and the role they play in the prevention and management of disease. The steps involved in performing a nutritional assessment plan as well as how to implement a nutritional action plan is also discussed.

Rationale

Students need to understand the nutritional principles that are involved in the growth, health, and performance of animals. Since nutritional deficiencies can be the underlying cause of many diseases, practical guidelines for nutritional management must be understood in order to recognize, prevent and manage these diseases.

Prerequisites

None

Co-Requisites

None

Course Learning Outcomes

Upon successful completion of this course, students will be able to

1. define and explain the basic components of nutrition, including carbohydrates, fats, proteins, vitamins, minerals, and water.
2. describe and explain the structure and function of both the "monogastric" and "ruminant" digestive systems.
3. list the components and the processing procedures of different feeds.
4. explain how to formulate and balance rations and diets.
5. list the nutritional requirements for each life cycle phase of the common domestic species
6. discuss and apply the practical guidelines for nutritional management of the common domestic species.

7. recognize proper and improper feeding of the common animal species, as well as the deficiencies that can lead to disease.
8. explain how nutrition can play a part in both the prevention and treatment of disease.
9. discuss and explain in common terms the information found on pet food labels.
10. list the differences in the feeding behaviors of dogs and cats.
11. list specific ingredients found in prescription diets and explain their role in the prevention and management of disease.
12. perform a nutritional assessment on a dog or cat.
13. develop and implement a weight loss program for a dog or cat.

Resource Materials

Required Text(s):

None

Reference Text(s):

McNamara, J. (2014). *Principles of companion animal nutrition* (2nd ed.). Upper Saddle River, New Jersey, 07458, USA: Pearson Education Inc.

Towell, T. (2011). *Practical weight management in dogs and cats*. Chichester, West Sussex, PO19 8SQ, UK.: Wiley-Blackwell.

Bassett, J. M., Thomas, J. A. (2014). *McCurnin's clinical textbook for Veterinary Technicians* (8th ed.). St. Louis, Missouri, 63043, USA: Elsevier.

Conduct of Course

This course consists of two hours of lecture weekly.

Evaluation Procedures

Midterm 1 -	20%
Midterm 2 -	25%
Quizzes/Assignments -	25%
Final Exam -	30%

The instructor reserves the ability to hold pop quizzes throughout the semester with no prior notification.

Grade Equivalents and Course Pass Requirements

Letter	F	D	D+	C-	C	C+	B-	B	B+	A-	A	A+
Percent Range	0-49	50-52	53-56	57-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-100
Points	0.00	1.00	1.30	1.70	2.00	2.30	2.70	3.00	3.30	3.70	4.00	4.00

A minimum grade of C (60%) is required in this course to progress to VS201 Animal Care and Nursing III and Applied Nutrition and VS206 Animal Care and Nursing IV.

A grade of C (60%) is required in this course to progress to semester two in the Animal Health Technology program.

Attendance

Classroom and laboratory attendance is considered vital to the learning process and as significant to the students' evaluation as examinations and reports.

- a. Students having a combination of excused and/or unexcused absence of 20 percent or higher for the scheduled course hours will be required to withdraw and will automatically receive a "RW" (required withdrawal) for the course, regardless of any other evaluation results. (RW is a failing grade.)
- b. An excused absence is one that is verified with your Instructor. Verification should be prior to the absence or the next class day following the absence. Verification of the absence may take the form of a note from your doctor/College nurse regarding illness, or a note from another Instructor regarding a field trip or other activity, or authorization by your Instructor. An unexcused absence is anything NOT verified by the instructor prior to the absence or the next class day following the absence.

NOTE: Any exceptions to the above attendance policy (e.g. timetable conflicts, work-related issues) must be approved in writing by the Department Chair prior to the beginning of the course.

It is the students' responsibility to know their own absentee record.

Normal hours are 8:30 a.m. to 6:30 p.m., with potential for evening courses, exams or extended field trips. Students are expected to be available for classes during these times.

Course Units/Topics

- 1) Carbohydrates
- 2) Fats
- 3) Proteins
- 4) Minerals
- 5) Vitamins
- 6) Water
- 7) Monogastric and Ruminant Digestive Systems
- 8) Foods and Ingredients
- 9) Formulating and Balancing Rations and Diets
- 10) Feeding for the Life Cycle Phases
- 11) Nutrition of the Canine
- 12) Nutrition of the Feline
- 13) Nutrition of the Equine
- 14) Nutrition of the Bovine (beef and dairy)
- 15) Nutrition of the Ovine
- 16) Reading Pet Food Labels
- 17) Feeding Behaviors of Dogs and Cats
- 18) Prescription Diets and Ingredients
- 19) Nutritional Management of Disease
- 20) Nutritional Assessment Guidelines for Dogs and Cats
- 21) Designing and Implementing Weight Loss Programs for Dogs and Cats



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