Bergen Community College Veterinary Technology Program Course Syllabus

Course Title: Nutrition & Principles of Feeding

Course Number: Vet 110

Program Affiliation: Veterinary Technology

Credits: 1

Lecture Hours: 1

Laboratory Hours: 0

Prerequisites: Admission into the professional segment of the Veterinary

Technology Program

Course Description:

This online course is designed to introduce the student to the fundamentals of veterinary nutrition encompassing small, large, and selected exotic animals. Topics cover the six classes of nutrients, their general functions, and the effects of deficiencies and potential toxicities. Nutrient and energy requirements, along with the feeding of animals in various stages of the life cycle will be covered, with an emphasis on the dietary management of selected disease states that affect domestic animals.

Student Learning Objectives:

Upon completion of this course, the student should be able to:

- Distinguish the role of the veterinary technician as a source of information for pet owners about small animal nutrition
- Identify the six basic nutrients and explain their respective functions
- Discuss the effects of a deficiency and excess of the six classes of nutrients
- Recognize that animals have daily energy requirements to maintain optimal health
- Explain the concepts of resting and maintenance energy requirements
- Calculate a companion animal's maintenance energy requirements based on its particular life stage and activity level
- Determine and describe the various components of a pet food label, including the guaranteed analysis, ingredient panel, and statement of nutritional adequacy

- Demonstrate the relevance of body condition scoring for companion animals
- Utilize the necessary information required to help pet owners make an educated decision in regard to which pet food to feed their animal based on their age or if they may have a disease that may require special diets
- State the nutrient requirements in various life stages of farm, exotic and companion animals

Means of Assessment:

The student learning outcomes will be assessed using a variety of assessment instruments including written exams, demonstration of laboratory skills, quizzes, laboratory reports, written reports, oral presentations, projects, etc.

Course Content:

- Gain insight into the importance of proper nutrition in animal health management
- Explain the six classes of nutrients and their role in supporting life, along with the effects of deficiency and excess
- Determine what nutrients are required by the body for each stage of life
- Apply the concept of daily energy requirements, along with the various factors that could influence them, to determine an animal's nutritional needs
- Examine the information supplied on pet food labels set forth by the pet food regulatory agencies
- Apply the knowledge of commonly used pet foods so that the technician may participate in client education
- Discuss special dietary recommendations in the management of particular diseases
- Recognize the importance of nutritional therapy in the critical care patient
- Report special feeding considerations, nutrient requirements, and feeds available for ruminants, swine, horses, and selected exotics in various life stages
- Identify toxicities associated with selected food, plants, and common household products

Course Materials:

Primary (required):

Case, Daristotle, Hayek, Raasch: *Canine and Feline Nutrition—A Resource for Companion Animal Professionals*, 3rd edition, Maryland Heights, Missouri, 2011, Mosby-Elsevier

Supplementary (suggested):

McCurnin, Dennis and Joanna Bassert: *Clinical Textbook for Veterinary Technicians*, 8th edition, St. Louis, Missouri, 2014, Elsevier-Saunders

Teaching Methodologies:

We will utilize textbooks and other written materials, including articles, videos, web links, and power point lectures with accompanying lecture outlines as resources to gain a basic understanding of the fundamentals of nutrition. Assignments, discussion forums, and other online activities will be used to enhance the learning objectives in this course. All resources and activities will be accessible in Moodle.

Exams:

Exams will be administered online. The exams are "closed book", which means you should not be using study aids or additional resources during the exam. You are allowed to use a basic function calculator while taking an exam. The student should open the exam at the time indicated, as no extra time will be allowed for completion of the exam if you are late. Exams will cover lecture material (including readings, related articles where applicable, group discussions, any handouts and related media). Exams may be given in a multiple choice and/or a short answer clinical case format. Do not minimize your screen, change browsers, or leave the exam "idle" for any extended period of time, as the exam will automatically submit and you will receive a grade for the work that was completed. You will not be able to enter the exam again. You may take the exams in the convenience of your home. However, if your internet service is unreliable, you should utilize one of the computer rooms available on campus.

If a make-up exam is to be provided (consult eligibility below), it will be given in a format of the instructor's choice, and administered on a selected date by the professor. It will be taken in the testing center.

Grading Criteria:

There will be one midterm and a comprehensive final exam. Students are expected to take exams as scheduled. Failure to attend a scheduled examination requires the student to contact the instructor within 72 hours of the scheduled exam date AND provide a written bona fide excuse for the absence. Upon demonstration of a verifiable absence (i.e. medical, family emergency, unavoidable travel, emergency auto repair, police, or court documentation), the instructor may provide a make-up exam, which will be given in a format of the instructor's choice and administered in the testing center on a date specified by the instructor. Failure to contact the instructor within this given time frame will result in a grade of 0 for that exam. The student should allocate sufficient time to get to an examination on time. If a student is late on the day of the examination, the student will be allowed to take the exam, however, no additional time will be allotted for completion of the examination.

You will have an opportunity to earn a maximum of 535 points in this course. The final grade for the course will be determined on an earned point system as follows:

100 pts

Climic quizzes (E 20 pts euch)	100 pts
Assignments, Forums	115 pts
Midterm examination	120 pts
Comprehensive final exam	200 pts
_	_
492-535 pts = A	
476-491 pts = B+	
444-475 pts = B	
428-443 pts = C+	
412-427 pts = C	
\leq 411 pts = F	

Online quizzes (@20 pts each)

IMPORTANT NOTE: A minimum final grade of 412 points overall constitutes a passing grade for this course.

Essential Skills:

In addition to the regular coursework required, students will complete clinical competencies for a list of essential skills associated with the course topic, as dictated by the AVMA accrediting body. Students will work to achieve a satisfactory competence level necessary for each required skill. All skills performed during the semester will be evaluated by the instructor, who will provide a signature after the successful completion of the course. A list of skill sets will be available through the program director and kept in the Veterinary Technology building for ongoing review.

Essential skills related to Nutrition and Principles of Feeding include:

- Understanding life stage energy and nutrient requirements of well animals
- Understanding key nutritional factors in disease conditions
- Understanding current developments in nutritional supplements and additives including benefits and potential toxicities
- Understanding and identifying substances that result in toxicity when ingested
- Developing and communicating hospital nutrition protocols

Students must perform all the essential skills required in this course. If any essential task is not completed satisfactorily, you will be notified by the instructor to discuss completion of the skill and make arrangements to make up said skill/task. If a skill is not completed satisfactorily by the semester's end, the student will be given a failure for the course, and the course will be repeated, regardless of final grade in lecture. You will also need to meet with the program director to determine your progression through the program.

Student Accommodations:

Students who require accommodations by the Americans with Disabilities Act (ADA) can request support services from the Office of Specialized Services of Bergen Community College, Room L-115, Pitkin Education Center, 201-612-5269 or e-mail www.oss@bergen.edu or link directly to Disability Services. Suggested deadline for accommodations is posted at this site.

Rules and Regulations Governing Conduct:

Each student is expected to obtain a copy of the Bergen Community Student Handbook and is responsible for knowing the information included in the Handbook. Copies are available in the Office of Student Life, the Welcome Center, evening office, and on the Bergen Web site. You may link directly to Student Life and Judicial Affairs to locate the Student Handbook. I have also provided a Bergen Link on the left hand side of the Moodle course: click on Student Life and Judicial Affairs; then click on Student Handbook to access.

In addition, each student accepted in the Veterinary Technology Program is expected to obtain a copy of the Veterinary Technology Student Handbook and is responsible for knowing the information included in this Handbook. Copies are available at orientation or through the program director.

All student and faculty are governed by college rules and regulations. Please refer to the Student Handbook for information regarding codes of conduct.

Academic Integrity:

Bergen Community College is committed to academic integrity. All of the work you will complete in this course will be an individual effort. Exams are administered online and are "closed book" which means you should not be using any resources during the exam. You may use a basic function calculator on exams. All other assignments and quizzes are designed for you to use resources provided in the course. Please refer to the current Student Handbooks for details related to academic integrity/discipline.

Course Calendar*

Week

1	Introduction to animal nutrition
2	Six Basic Nutrients
3	Energy Requirements

4	Pet Food Labels & Assessment
5	Pet Food Labels & Assessment
6	Feeding for Life Stages
7	Feeding for Life Stages
8	Midterm Examination (online); begin Small Animal Clinical Nutrition
9	Small Animal Clinical Nutrition
10	Small Animal Clinical Nutrition
11	Small Animal Clinical Nutrition
12	Selected Food & Plant Toxicities
13	Large Animal Nutrition
14	Exotics Nutrition
15	Comprehensive Final Examination (online)