

## OVERVIEW

You've just learned about some of the aspects of animal nutrition, reproduction, genetics, and aging in your course. Now, it's time to put that knowledge to use.

Instead of taking a final examination, you'll write a research paper. You'll complete and submit the research paper, which will be graded before you continue to your next course.

As a veterinary technician, you'll become adept at researching information, for your own use (continuing education) and for client educational purposes. You should familiarize yourself with the methods of research and be able to analyze, interpret, and understand the material you find. Rewriting this information in your own words can also help you assimilate the information.

## INSTRUCTIONS

You'll write one research paper containing five parts. There's no required length (maximum or minimum); however, make sure you provide the required details for each subject. Be thorough.

### PART 1: PET FOOD COMPANY

For Part 1, you'll research a pet food company. Your research will include

1. The history of the company
2. A brief synopsis of the types of pet foods manufactured by the company
  - Foods are manufactured for which species of animals
  - Life-stage
  - Therapeutic diets
  - Canned, dry, semi-moist types of food
  - Miscellaneous (natural, holistic, organic)

3. Choose two dog and two cat foods produced by the company and give a detailed description of each. Be sure to include
  - The name of each food
  - Dog or cat food
  - Life-stage or therapeutic diet
  - Calories provided (per cup or can)
  - Protein, carbohydrate, and fat content
  - The first five ingredients. What does each ingredient provide nutritionally (source of protein, fat, carbohydrate, vitamin, mineral, fiber)?
4. Choose an appropriate diet (made by this company) that you could feed to an 11-year-old dog that weighs 82 pounds. Calculate how much of that food you would feed daily. Show your calculations and explain why this particular food would be good for your canine patient.
5. Choose an appropriate diet (made by this company) that you could feed to a four-year-old cat that is obese (11 pounds) and needs to lose weight because it's diabetic. Calculate how much of this food you would feed the cat daily; show your work. Explain why this particular food would be good for this feline patient.

## **PART 2: BODY SYSTEMS**

For Part 2, choose one of the following body systems and describe what affects improper nutrition and aging could have on this body system. Be sure to include a detailed description of the body organs involved in this system, and their normal function(s) in the body.

Body systems:

1. Cardiovascular
2. Respiratory
3. Gastrointestinal
4. Dental/oral

5. Endocrine
6. Muscular and skeletal
7. Urinary
8. Nervous

## **PART 3: VITAMINS**

For Part 3, describe in detail the functions of two of the following vitamins.

1. Vitamin A (retinol/beta-carotene)
2. Vitamin B<sub>1</sub> (thiamin)
3. Vitamin B<sub>12</sub> (cobalamin)
4. Vitamin E (tocopherol)
5. Vitamin C (ascorbic acid)
6. Vitamin D (calciferol)
7. Vitamin K
8. Folic Acid

## **PART 4: MINERALS**

For Part 4, describe in detail the functions of two of the following minerals.

1. Calcium
2. Potassium
3. Phosphorus
4. Sodium
5. Iron
6. Copper
7. Iodine
8. Selenium

## PART 5: FIVE STAGES OF GRIEF

For Part 5, identify and describe the five stages of grief.

You'll deal with many grieving clients while working in veterinary medicine. Pets die either of natural causes or are euthanized at the clinic following illness or injuries. You should be able to distinguish the five stages of grief and be able to discuss the subject with these clients.

Include five sources of literature and/or websites that you can refer clients to should they have more questions and/or require counseling.

### PROJECT SPECIFICATIONS

1. Utilize a word processing program, like Word, WordPerfect, or Open Office. The research paper must be typewritten in 8.5"X11" white paper.
2. The title page should contain the following information:
  - a. The Title: BIOL3200 Animal Nutrition Research Project
  - b. Your name
  - c. Your student number
  - d. The date your project was submitted
3. The paper should be easy to read, typed in 12 point Times New Roman, double-spaced, with correct spelling, grammar, and sentence and paragraph structure.
4. You should include at least three references for each part. The information must be supported by trusted veterinary medical publications and websites. You can use your study guide and the course text-book for assistance, but they shouldn't be your main source of data. *Don't* use sites like Wikipedia.

# GRADING CRITERIA

Your research project will be graded according to the following guidelines:

| <b>Criteria</b>              | <b>Points</b> |
|------------------------------|---------------|
| Part 1: Pet Food Company     | 40            |
| Part 2: Body Systems         | 20            |
| Part 3: Vitamins             | 10            |
| Part 4: Minerals             | 10            |
| Part 5: Five Stages of Grief | 10            |
| Written Communication        | 10            |
| <b>Total</b>                 | <b>100</b>    |

# SUBMITTING YOUR RESEARCH PROJECT

To submit your graded project, follow these steps:

1. **Turn it in personally at the professor's office (I111) one week before the last day of the semester.**

Be sure to keep a backup copy of any files you submit to the school!