Global Learning Semesters Course Syllabus Course: ASCI 105 – Introduction to Animal Health & Disease: Large Farm Animals Department: Animal Science

Host Institution: Galen University, San Ignacio, Belize



Course Summary Course Code Course Title Recommended Credit Hours ASCI 105 Intro. Animal Health & Disease 3 Contact Hours Prerequisites Subject 42-45 None Animal Science Level of Course Language of Instruction Department Animal Science Lower Division English

Course Description

This course will examine basic scientific fundamentals of livestock production, including anatomy and physiology, feeding and nutrition, reproductive physiology, selective breeding, health, management. This course will provide students with opportunities for physical examination of animals in the field, as well as other practical techniques used in animal husbandry and veterinary medicine.

Prerequisites (if applicable)

None

Instructor Information

Edward Tesecum, D.V.M. Doctor of Veterinary Medicine, Universidad Agraria de la Habana, Cuba. Private practice, veterinary medicine in Belize.

Course Objectives

The student will develop a basic understanding of the role of livestock in agriculture (Belize and global). The course will introduce basic concepts and principles of animal nutrition, growth, health, behavior, reproduction, and genetics, as well as practical commercial applications, such as ration formulation, disease prevention, artificial insemination, genetic selection, and crossbreeding systems. Labs and field trips will provide opportunities to gain practical knowledge and to better understand the lecture material.

Student Learning Outcomes

The student will demonstrate by the end of the course a basic understanding of the concepts and principles of animal science and be able to demonstrate practical skills such as physical assessment, suturing, identification of major diseases Upon successful completion of the course, the student will be able to:

• Describe the major issues and challenges in animal agriculture in Belize and globally.

- Be familiar with livestock terminology.
- Know and describe the basic anatomy and physiology of large farm animals
- Attain a basic understanding about the science of and applications to animal feeding, growth, health, reproduction and breeding.
- Demonstrate basic mastery of physical examination of cows, horses, pigs and sheep, suturing and identifying basic skin diseases.

Course Schedule

Day 1:	Introduction to course Animal Agriculture in Belize: Contemporary Issues
Day 2:	Introduction to Physical Examination in Large Animals LAB: Bones
Day 3:	Introduction to Physical Examination in Large Animals cont'd LAB: Suturing
Day 4:	Field Practical: Horses
Day 5:	Field Practical: Horses cont'd
Day 6:	Diseases of Ruminants Diseases of Horses, Sheep and Goats LAB: Mastitis
Day 7:	Field Practical: Pigs
Day 8:	Field Practical: Sheep
Day 9:	Field Practical: Cattle, Dairy Cows
Day 10:	Presentations Final Exam Course evaluation

Evaluation and Grading

The evaluation for the course was based on the following:

Participation (discussions & field work)	35%
Presentation	20%
Journal assignment	10%
Final Examination	35%

Participation

Students are expected to attend all classes and all field trips, labs or other course related events. Any assigned readings should be done in advance of the class to which they apply. Students are expected to actively participate in discussions, making reference to assigned readings and materials. In the field students will be assessed on the attentiveness, ability to demonstrate skills and attention to safety and security of themselves and the animals.

Presentation

Each student will do a short (15-20 minutes, including time for questions) presentation (preferably using powerpoint) on a topic related to the course. Depending on numbers of students, teams may be used instead of individual reports. The topic should be focused enough to allow for detailed coverage in a short presentation. Where appropriate, discuss how the topic relates to Belize.

Journal Assignment

Students are expected to keep a journal in which they reflect on what they are learning in lectures, readings and field work. At the beginning of the course students are expected to outline their goals for this summer course. Why did you choose the course? Why did you come to Belize? What do you hope to learn during these two weeks? Also comment on cultural and ethic differences that you experience (in relation to anything, but especially in relation to

animals (how they are viewed and treated, what vets do in Belize, etc.) Relate you thoughts to your career goals. The journal should end with a self-assessment of your participation and work in the course with explicit references to the readings, lectures, field experiences and online resources provided in the syllabus.

Final Exam

The final exam will cover all the material in the course. It will be multiple choice, short answer and/or essay questions.

SUMMARY

The course consists of 75 hours in total over a two week period. Generally, the course meets Monday to Friday from 9am to 5pm, with an hour break for lunch. Those times are adjusted to ensure maximum field experiences at farms. See the daily schedule for details. The course time is divided as follows:

- Lecture/discussion = 15 hrs
- Laboratory time = 8 hrs
- Field work = 52 hrs
- Total = 75 hrs

Readings and Resources

Required Text:

R. D. Frandson, W. Lee Wilke, Anna Dee Fails, <u>Anatomy and Physiology of Farm</u> <u>Animals</u>, 6th edition, Philadelphia: Lippincott Williams & Wilkins, 2003.

Suggested Readings:

Any additional reading materials will be made available on the course website and/or put on reserve in the library.

Useful Websites for Study and/or Research Materials:

Belize Agricultural Health Authority (BAHA) – <u>www.baha.bz</u> Beef Improvement Federation – <u>www.beefimprovement.org</u> Breeds of Lifestock, O.S.U. – <u>www.ansi.okstate.edu/breeds/</u> OIE- World Organization for Animal Health - <u>www.oie.int</u> International Federation for Animal health – <u>www.ifahsec.org</u> American Veterinary Medicine Association – <u>www.avma.org</u> National Mastitis Council – <u>www.nmconline.org</u> Livestock Safety: <u>www.ag.auburn.edu./~schmisp/safety/</u>

Other Academic Policies

<u>Intellectual Integrity:</u> Intellectual Integrity is one of the ideals for which Galen University stands. Students are expected to adhere to high standards of intellectual integrity and honesty. Cheating and plagiarism are contrary to the ideals of Galen University. Cheating is defined as dishonesty of any kind in connection with assignments and examinations. It applies to both giving and receiving unauthorized help. Plagiarism is defined as presenting the work of someone else as one's own. Cheating and plagiarism include, but are not limited to, the following:

- Using any unauthorized aids on an exam or test
- Representing someone else's work as your own
- Falsifying documents or grades
- Submitting someone else's work as your own
- Submitting the same essay or report in more than one course (without permission)
- · Looking at someone else's answers during an examination or test
- Impersonating another person at an examination or test or having someone impersonate you
- Making up sources or facts for an essay or report

Cheating and plagiarism will be treated as a disciplinary offence in addition to failure in that particular assignment or examination. (Taken from Galen University's Academic Policies)