



## Iowa Wesleyan University

ASCI-2943: Large Animal Veterinary Practice in the Tropics

Summer 2020

June 3- June 17

**Credit Hours:** 3 credit hours

### Instructor Contact Information

Instructor: Erica Ward, DVM

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Instructor: Amanda Guthrie, DVM,

DACZM

### Required Text:

1. McCurnin, D.M., *Clinical Textbook for Veterinary Technicians*, 2nd edition, Philadelphia, Saunders Company, 1990.
2. Frandson, W. Lee Wilke, Anna Dee Fails, *Anatomy and Physiology of Farm Animals*, 6th edition, Lippincott, ISBN: 0-7817-3358-8
3. J.R Campbell, M. D Kenealy, K. L Campbell, *Animal Science*, 4th edition, McGraw Hill 2003
4. Niles, J and John Williams, Suture materials and patterns. *In Practice* 1999; 21:6 308-320
5. Sissener, T. (2006), Suture patterns. *Companion Animal*, 11: 14–19.
6. *Optional - The Merck Veterinary Manual*, 8th Ed., Merck & Co., ISBN: 009-11910298

### Iowa Wesleyan University Mission Statement

Iowa Wesleyan University is a transformational learning community whose passion is to educate, empower, and inspire students to lead meaningful lives and careers.

Iowa Wesleyan University is a historic, faith-inspired, four-year university. The university is affiliated with the United Methodist Church with which it shares a commitment to spiritual values, social justice and human welfare.

### IW Life Skills

- **Communication:** Students will show proficiency in acquiring, processing, and transferring information in a variety of ways, including written communication, oral communication, and information literacy.
- **Critical Reasoning:** Students will strategically apply critical thinking and problem-solving skills.

- **Civic Engagement:** Students will develop the knowledge, skills, values, and motivation to actively engage in communities to promote social justice and human welfare.

### **Course Description**

This course offers exciting field opportunities in Belize, a country known for its animal diversity and ecological progressiveness. Students will have the opportunity to learn hands-on veterinary examination techniques at working ranches and farms (horse, sheep, cattle and pigs) as well as learn about animal agriculture in Belize, including analyzing laboratory specimens in a laboratory. This course is designed for the veterinary, pre-veterinary, animal science or zoology students to gain working knowledge of the husbandry, and health issues confronting farm animals such as horses, sheep, pigs and cattle (beef and dairy) in Belize. The course is introductory but intense with laxity intentionally built into the schedule to accommodate individual interests of the students taking the course.

Classroom sessions on anatomy, physiology and pathology lay the foundation of knowledge needed to confront animal husbandry and disease issues. The majority of the student's time will be spent in fieldwork involving such areas as a working horse ranch and breeding facility; a working sheep farm focusing on genetic breeding; and cattle (dairy and beef) and pig farms. Each of the field experiences will provide students with general husbandry (shelter, nutrition, and waste management) knowledge of large farm animals. Additionally, basic veterinary care such as physical examination and basic suture technique will be taught and more advanced veterinary care such as preventive medicine, reproductive management, medicine and surgery will be observed. The field experiences will provide students with hands-on experience and problem-solving skills that will assist them while developing careers related to animal health.

### **Course Goals and Learning Objectives**

By the end of this course, the student will be able to demonstrate a basic understanding of the concepts and principles of animal science and be able to demonstrate practical skills such as physical assessment, suturing, and 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 husbandry, feeding, growth, health, reproduction and breeding, and animal welfare issues
- Demonstrate basic mastery of diagnostics and therapeutic management procedures of cows, horses, pigs and sheep
- Identify basic skin diseases of large animals
- Demonstrate basic suture skills and have a basic understanding of tissue handling, suture patterns, and suture material

In addition, the following Learning Outcomes will be addressed or assessed as part of the course:

#### Communication Skills

- Oral Communication: Students will deliver a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.
- Information Literacy: Students will show the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand.

### Critical Reasoning

- Critical Thinking: Students will design, evaluate and implement a strategy to answer open-ended questions or achieve desired goals.
- Problem Solving: Students will comprehensively explore issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.

### Civic Engagement

- Civic Engagement: Students will demonstrate their ability to make a difference in the civic life of communities and develop the combination of knowledge, skills, values and motivation to make a difference in the quality of life of those communities.
- Global Learning: Students will become informed, open-minded, and responsible people who are attentive to diversity across the spectrum of differences, seek to understand how their actions affect both local and global communities, and address the world's most pressing and enduring issues collaboratively and equitably.

## **Course Policies**

### **Attendance and Participation Policy**

In accordance with the IW Catalog and the IW Undergraduate Student Attendance Policy, students are expected to attend all class meetings for which they are registered. This is regarded as a matter of individual student responsibility. As mandated by federal law, all faculty members are expected to keep accurate records of class attendance. The only excused reasons for absences will be illness that impairs ability to attend and function within the classroom setting; unavoidable personal emergency, or participation in a University-sponsored event.

Students are expected to attend all class sessions on all days of class. It will be the responsibility of the student to contact the course instructor, preferably before the absence, to provide the appropriate documentation and verification for the reason for the absence, and to make arrangements with the course instructor for missed work. Students missing a class session without following this protocol will be subject to limited participation in hands-on practice at the instructor's discretion.

Regardless of the reason for absences, both absences from class will count toward the percentage of allowed absences. A "class" is one class session- some days, there are multiple class sessions. Students are responsible for all missed class material. Students may be subject to limited participation in hands-on practice at the instructor's discretion if they have missed the underlying material needed to safely perform the task at hand.

A warning to the student and student's home university point person may result if the student is absent 12.5% of the total number of class meetings. If a student is absent 25% of the total number of class meetings, the course instructor must notify the Registrar's Office which will initiate the withdrawal of the student from the class with a grade of WF (Withdrawn-Fail).

## **Grading Scale:**

Grading Scale:

93-100%	= A	73-76.99%	= C
90-92.99%	= A-	70-72.99%	= C-
87-89.99%	= B+	67-69.99%	= D+
83-86.99%	= B	63 -66.99%	= D
80-82.99%	= B-	60- 62.99%	= D-
77-79.99%	= C+	59 and below	= F

## **Assignments and Points**

Your course grade will be determined as follows:

Writing Assignment:	20%
Exam:	20%
Student Presentation:	10%
Program Participation:	50%

The exam and writing assignment will be due 10 days after completion of the program. The exam will be online and open book format. The student presentation will occur during the program and you will receive all assignment details and grading rubrics on the first day of the program.

Your supervising veterinarian/instructor will complete a detailed student participation evaluation for your program participation grade. For this evaluation, you will be scored on the following criteria throughout the program:

- *Level of engagement.* You are expected to proactively contribute to class by offering ideas, asking questions, and volunteering answers multiple times each session.

- *Quality of contributions.* A majority of your contributions must be relevant and reflect understanding of the topic, provide insight, draw connections regarding the material, build upon remarks of another student, and/or demonstrate critical thinking skills.

- *Listening Skills.* You are expected to actively and respectfully listen to your peers and instructor, maintaining full engagement throughout the class session or activity.

- *Preparation.* You should always be prepared for class or the scheduled activity with necessary class materials. You should complete all homework assignments on time and be ready to discuss when appropriate.

- *Behavior.* You should never display disruptive or inappropriate behavior during a class session or activity. You should be polite and cooperative with students and the instructor.

## **Time and Commitment**

Class sessions and volunteer activities will take up a large portion of your day. This course will cover a large volume of terms, techniques, and information. We expect that you will find the time you invest to be productive and helpful, both in this class and going forward.

### **Supplies**

We have the opportunity to have this course in a field setting that allows for hands-on observation, practice, and study. This setting provides a unique hands-on opportunity to see what you are learning in practice. Each day, please plan to bring the following materials with you in a day pack, backpack, or tote bag: class session materials (coursepack(s) if required, notes, notebook and/or laptop, writing utensils, etc.), wrist watch, snacks, refillable water bottle, insect repellent, and sunscreen. You must wear closed-toed hiking boots, rain gear, and scrubs or a white lab coat. Your clothes may get dirty or ripped.

### **Technology**

You are welcome to use a laptop to take notes in class if you prefer. It is certainly not required. Please ensure that your phone is off during class sessions.

### **Diversity and Disability Statement**

Iowa Wesleyan values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, please notify me as soon as possible. Students with disabilities are eligible for accommodations to help remove learning barriers in the course.

### **Academic Honesty**

Iowa Wesleyan has developed a strict policy to deal with those students who commit acts of academic dishonesty such as plagiarism and/or cheating. Such acts will not be tolerated in any form by the faculty and staff, and will carry stiff penalties. For more information regarding this policy, please consult the most current version of the IW Catalog.

**Course Schedule (subject to revision):**

**WEEK 1:**

Day 1	9am-12pm Noon-1pm 1pm-2pm  2pm-4pm	Introduction to Course Lunch Introduction to Basic Suture Procedures <b>Required Reading:</b> <i>Sissener, Suture Patterns or Niles, Suture Materials and Patterns</i> Animal Agriculture in Belize
Day 2	9am-12pm  Noon-1pm 1pm-5pm	Introduction to Large Animal Physical Examination <b>Required Reading:</b> <i>Frandsen, pp. 1-13, 54-71</i> Lunch Practical: Horse Physical Exam - Whiskling Duck Farm
Day 3	9am-12pm	Practical: Beef Cattle - Paslow Falls Bullet Tree
Day 4	6:30am-2pm	Practical: Dairy Cattle - Central Farm
Day 5	9am-5pm	Practical: Horses- Hannah's Farm, Big Rock Falls <b>Required Reading:</b> <i>Deworming and Shots</i>

REQUIRED WEEKEND ACTIVITY: Free Animal Health Clinic in local village

**WEEK 2:**

Day 6	8:30am-12pm Noon-1pm 1pm-4pm	Introduction to Animal Health and Reproduction Lunch Introduction to Animal Health and Reproduction cont. <b>Required Reading:</b> <i>All sections on cattle in Frandsen</i>
Day 7	8:30am-4pm	AI Farm, Central Farm
Day 8	7am-2pm	Practical: Sheep and Goats, Bullet Tree <b>Required Reading:</b> <i>All sections on sheep in Frandsen</i>

Day 9	9am-4pm	Practical: Pigs - Husbandry and Clinic, San Antonio <b><i>Required Reading: All sections on pigs in Frandson</i></b>
Day 10	9am-12pm Noon-1pm 1pm-2:30pm 2:30pm-3:30pm	Wrap-up and Presentations Lunch Final Exam Course evaluation and debrief

Please note: Field trip schedules are subject to change without notice.