# ANS 6723 Mineral Nutrition of Livestock

Spring Semester 2024 (Synchronous Hybrid In-Person and Online)

Thursday 7<sup>th</sup> and 8<sup>th</sup> Periods 2:00 to 3:50 PM

201 Animal Sciences (Building 499)

In-Person (ZOOM Available for REC students only)

Instructor: Dr. John Arthington

Department of Animal Sciences, Building 499; Room 201

Email: jarth@ufl.edu

## Course Overview and Objectives

ANS 6711 utilizes a hybrid approach involving online recorded videos, in-person lectures, and reading assignments to provide students a detailed overview of essential macro- and micro- elements in livestock nutrition. Although all livestock species will be included, the course will provide a special focus toward forage-consuming livestock. Topics will include the role, function and metabolism of essential minerals. Requirements, sources, deficiency, and toxicity symptoms will be covered. Students will learn practical formulation calculations and supplementation strategies. The course is enhanced by the inclusion of recorded expert interviews.

## Learning Objectives

- 1. Understand the role, function, and metabolism of essential minerals in livestock nutrition
- 2. Recognize symptoms of mineral deficiency and toxicity
- 3. Formulate mineral premixes and apply practical supplementation strategies

## **Prerequisites**

A course in animal or human nutrition is required. This prerequisite may be waived with sufficient evidence of appropriate previous coursework and experience.

# Course Assignments and Exams

Final grades are based on a semester total of 100 points derived from the sum of 3 written exams (25 points each) and 6 quizzes (5 points each). Exams will test your knowledge of all course material from the start of the course up to the exam. Therefore, Exam 3 will essentially cover all material in the course. There will be no final examination.

## Make-up Policy

Exams are prescheduled. If you have an extreme-case conflict, please notify the instructor as soon as possible so alternative arrangements can be made. Class attendance is an expectation. There will be no make-up opportunity for quizzes that are missed due to attendance. The lowest quiz grade will be dropped from the calculation of the final grade. For university policy on this topic, see: <a href="https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/</a>

Course Grading: Total points for the course will be 100 points

Exams $(n = 3)$	75 pts
Quizes (n =6; lowest quiz score dropped)	25 pts

# Grades will be based on the following rounded point totals:

A	100 – 95%
A-	94.99 – 88%
B+	87.99 – 86%
В	85.99 - 82%
B-	81.99 - 78%
C+	77.99 – 76%
C	75.99 – 70%
C-	69.99 – 68%
D+	67.99 – 66%
D	65.99 - 60%
D-	59.99 – 58%
Е	Less than 57.99

For information on current UF policies for assigning grade points, see <a href="https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</a>

#### Software Use:

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

#### Online Course Evaluation Process:

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at:

https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at: <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>

#### Academic Honesty:

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received

unauthorized aid in doing this assignment." It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

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## Services for Students with Disabilities:

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation 0001 Reid Hall, 352-392-8565, <a href="https://disability.ufl.edu/">https://disability.ufl.edu/</a>

## Campus Helping Resources:

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, <a href="https://www.counseling.ufl.edu">www.counseling.ufl.edu</a>

Counseling Services Groups and Workshops Outreach and Consultation Self-Help Library Wellness Coaching • U Matter We Care, <a href="www.umatter.ufl.edu/">www.umatter.ufl.edu/</a>

Career Connections Center, First Floor JWRU, 392-1601, <a href="https://career.ufl.edu/">https://career.ufl.edu/</a>

Student Complaints: (Residential Course) <a href="https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/">https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/</a>, and (Online Course) <a href="https://www.distance.ufl.edu/student-complaint-process">http://www.distance.ufl.edu/student-complaint-process</a>