

Course Title

ANS 6775 Essentials of Livestock Immunology

Course Instructor

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Office hours

By appointment. Please call or email to schedule an appointment.

Course Description

ANS 6775 introduces basic immunological concepts and describes how they relate to immunity for livestock and other species.

Requirements

None

Time and Location

Day and time TBD; 201 Dairy Science Building

In-person and online class; meets synchronously. Please check Canvas for Zoom link.

This class is a one-credit course and meets for a period of three weeks for total of 15 h lecture.

Supporting texts

There is no required textbook. However, for extra insight and understanding please refer to the textbooks:

Janeway's Immunobiology (Garland Publishing, ISBN13: 978-0815342434)

Abbas et al. Cellular and Molecular Immunology (Elsevier, ISBN 978-1-4377-1528-6)

Course Objectives

1. To provide knowledge of:
 - Organs, cells and molecules that make up the immune system of domestic livestock species
 - innate and adaptive mechanisms of protection against the wide variety of pathogens that threaten animal health,
 - current strategies to manipulate immune systems of livestock species (i.e., vaccines).
2. To conceptualize theories and processes relating to immune dysfunction and immunization.
3. To develop theoretical and critical thinking skills such as development of hypotheses regarding immune mechanisms and development of solutions to infectious diseases of livestock and application of concepts to management of livestock.

Course Website on CANVAS

This Canvas website will contain the syllabus and resources such as assigned and recommended readings.

Lesson *PowerPoint* slides will also be provided on the course website. Furthermore, email communications should happen through the course website.

Grades and Make-Up Policy

Final grades are based upon three 50-point tests. Each test will make up 33% of the final grade. Grades are assigned as follows:

- 93-100 A
- 89-92.99 A-
- 85-88.99 B+
- 81-84.99 B
- 77-80.99 B-
- 73-76.99 C+



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- 69-72.99 C
- 65-68.99 C-
- 60-64.99 D
- <10 E

For information on current UF policies for assigning grade points: [Grades and Grading Policies < University of Florida \(ufl.edu\)](https://www.ufl.edu/undergraduate/grades-and-grading-policies/)

A majority of the exam material will come from the lecture notes (90%) with the remainder (10%) coming from assigned reading material. An exam may not be missed without prior consent of the instructor. All requests to either miss or to be excused from an exam must be submitted in writing and signed by the student regardless of the reason. Any exam missed for reasons other than those listed below will not be excused and a grade of zero will be recorded.

Excused absences include:

1. Absence for a university-approved field trip or activity (must be cleared one week in advance).
2. Absence for a death or serious illness in the immediate family (verification by obituary).
3. Absence resulting from personal illness (verification consisting of a letter of explanation from hospital or doctor on official letterhead).

Request to re-grade an exam must be made within one week from the date the grades were assigned. Grade challenges must be submitted in writing and returned to the instructor.

No make-up exams without a valid medical excuse (doctor or infirmary) or prior notification of a University sponsored event. Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <http://gradcatalog.ufl.edu/content.php?catoid=5&navoid=1054>

Course Topics*

Section	Day		Topic
1.	M Jan8	M Jan 8	General properties of the Immune System
		W Jan 17	Cells and tissues of the Immune System
	W Jan17	W Jan 24	Molecules of the Immune System
		W Jan 31	Innate pattern recognition receptors
	W Jan24	M Feb 5	Phagocytic defenses
		M Feb 12	Test 1
2.	M Feb5	W Feb 14	Antigens and Antibodies
		W Feb 21	Antibody formation and diversity
	W Feb14	W Feb 28	Antigen processing and antigen presentation to T lymphocytes
		W Mar 6	Antigen receptors and accessory molecules of T lymphocytes
	W Feb21	W Mar 13	Lymphocyte maturation and expression of antigen receptor genes
		W Mar 20	Test 2
	3.	W Mar6	W Mar 27
W Apr 3			Immune dysfunction in livestock

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		W Apr 10	Nutrient-immune interactions
	W Mar13	W Apr 17	Immunostimulants for livestock
	W	W Apr 24	Test 3

ATTENDANCE AND MAKE-UP WORK:

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>.

IN-CLASS RECORDING:

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

ONLINE COURSE EVALUATION PROCESS:

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.ua.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 <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.ua.ufl.edu/public-results/>.

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>.

SOFTWARE USE:

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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.

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, <https://disability.ufl.edu/>

CAMPUS HELPING RESOURCES:

Health and Wellness

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road,

Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints: View the Distance Learning Student Complaint Process.