ANSC 3702 Applied Avian Physiology Syllabus

Instructors:

Dr. Greg Fraley, Purdue University, gfraley@purdue.edu

Dr. Zachary Williams, Michigan State University, will3343@msu.edu

Dr. Dawn Koltes, Iowa State University, delkins@iastate.edu

Dr. Kahina Ghanem, University of Minnesota, kahina@umn.edu

Scheduled Time/Dates:

Instructional Lecture: Monday - Friday: 8:00 am – 12:00 pm

Hands-on Laboratory/Field/Farm (poultry) Work: Monday - Friday: 1:00 pm - 6:00 pm

Scheduled: May 31st to June 10th, 2022

Locations:

Teaching Classroom – ABLMS 125

Teaching Lab - ASVM 448; Poultry Farm (1835 Buford Pl.)

Instructional Time & Student Workload Assessment:

This course meets the UMN administrative policy for instructional time per course credit and student workload expectations.

Course Description: Applied Avian Physiology is an intensive 3-credit lecture and laboratory course designed to introduce industry relevant aspects of avian physiology with emphasis on welfare, behavior, neurobiology, muscle, cardiovascular, immunology, digestive, endocrinology, and reproductive systems for egg and meat producing birds.

Learning Outcomes: At the completion of this course, students should be able to:

- 1. Describe the major functions and processes associated with behavior, nervous, muscular, cardiovascular, immune, digestive, endocrine and reproductive system.
- 2. Describe physiological processes that are unique to avian species and that provide challenges and opportunities for housing and management in the poultry industry.
- 3. Critically evaluate and communicate both verbally and written scientific research that integrates physiological concepts discussed in class.

Grading:

Your final grade for this course is calculated from a total of 600 points:

Quiz 1 50 points

Quiz 2 50 points

Quiz 3 50 points

Quiz 4 50 points

Quiz 5 50 points

Group presentation 100 points

Presentation team evaluation 25 points

1 page summary of debate topic 25 points

Lab Notebook 200 points

Final grades are assigned as follows:

A 558 - 600 points

A- 540 - 557 points

B+ 522-539 points

B 498 - 521 points

B- 480 - 497 points

C+ 462 - 479 points

C 438 - 461 points

C- 420 - 437 points

D+ 402 - 419 points

D 378 - 401 points

D- 360 - 376 points

F 359 points or less

Classroom expectations:

- Attendance: Full participation is not only expected but required. Late arrival or early departure is disruptive and disrespectful to the instructor and peers, and may result in the loss of ALL points for that section.
- *Missing or late assignments*: Missed in-class evaluation (quizzes and exams) cannot be made up and students will receive a zero. Missed labs or evaluations may be made up only for sponsored activities. The student must provide signed official documentation of this sponsored event or forfeit all points associated with the missed class time. If you have an emergency, you must email the instructor before class or lab begins. Late work is not accepted and will receive a zero.
- *Downloading video and material:* Material used in the instruction of this course are the property of the instructor and posting this material on other websites (e.g. Chegg, Quizlet, Studocu, Blue Study, Course Hero) is a violation of university policies.
- *Quizzes:* For quizzes that will be given in this course, it is expected that students will adhere to all academic standards outlined by the instructors.

Lab protocols:

- *Photography:* Cell phone use or photography during lab is strictly prohibited. Any use of cell phones for any purpose outside of specific times will result in removal of the student and forfeit of all points associated with that day. Repeated violations of this could result in dismissal from the program.
- *Dress code:* Clean, close-toed shoes, and long pants. We are going to be working with poultry in the lab sections, so please be mindful you may get dirty. Additional personal protective equipment will be provided for each lab.
- Biosecurity: The ISU poultry farm maintains a strict biosecurity policy of 72 hours
 without bird and swine contact to enter the research facilities; this includes commercial,
 research, hobby, or pet birds that would interfere with compliance to the biosecurity
 policy. Please let ALL instructors know if you have potential conflicts with this policy as
 soon as possible.
- *Transportation*: Transportation will be provided to the poultry farms. Times and location the vans leave will be announced in class and students are expected to arrive before the vans leave as they will not wait on students. If a student misses transportation, they are anticipated to make their own accommodations to arrive at the farm to participate in the course.

Scholastic Dishonesty

You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code:

http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student Conduct Code.pdf) If it is determined that a student has cheated, the student may be given an "F" or an "N" for the course, and may face additional sanctions from the University. For additional information, please see: http://policy.umn.edu/education/instructorresp. The Office for Community Standards has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: https://communitystandards.umn.edu/avoid-violations/avoiding-scholastic-dishonesty. If you have additional questions, please clarify with your instructor for the course. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.

Disability Accommodation

The University of Minnesota views disability as an important aspect of diversity and is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center (DRC) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations. If you have, or think you have, a disability in any area such as, mental health, attention, learning, chronic health, sensory, or physical, please contact the DRC office on your campus (UM Twin Cities - 612.626.1333) to arrange a confidential discussion regarding equitable access and reasonable accommodations. Students with short-term disabilities, such as a broken arm, can often work with instructors to minimize classroom barriers. In situations where additional assistance is needed, students should contact the DRC as noted above. If you are registered with the DRC and have a disability accommodation letter dated for this semester or this year, please contact your instructor early in the semester to review how the accommodations will be applied in the course. If you are registered with the DRC and have questions or concerns about your accommodations, please contact your (access consultant/disability specialist). Additional information is available on the DRC website UM Twin Cities https://diversity.umn.edu/disability/) or e-mail (UM Twin Cities - drc@umn.edu) with questions.

Sexual Harassment

"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents Policy:

https://regents.umn.edu/sites/regents.umn.edu/files/policies/Sexual_Harassment_Sexual_Assault_Stalking_Relationship_Violence.pdf

Equity, Diversity, Equal Opportunity, and Affirmative Action

The University provides equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For

more information, please consult Board of Regents Policy: http://regents.umn.edu/sites/regents.umn.edu/files/policies/Equity_Diversity_EO_AA.pdf.

Mental Health and Stress Management

As a student you may experience a range of issues that can cause barriers to learn, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website: http://www.mentalhealth.umn.edu.

Academic Freedom and Responsibility: for courses that do not involve students in research

Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled. *

Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help. Contact the instructor, the Department Chair, your adviser, the associate dean of the college, or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost.

Language adapted from the American Association of University Professors "Joint Statement on Rights and Freedoms of Students".

Date	Topic	Location	Instructor	Assignment
5/31 AM	Behavior/Nervous system	ABLMS 125	Dr. Fraley	
5/31 PM	Bird handling/Tonic immobility	Poultry Farm	Dr. Fraley	
6/1 AM	Neurological Welfare	ABLMS 125	Dr. Fraley	
6/1 PM	Sensory lab	448 ASVM	Dr. Fraley	Quiz 1
6/2 AM	Muscular system	ABLMS 125	Dr. Fraley	
6/2 PM	Necropsy	Poultry Farm	Dr. Fraley	
6/3 AM	Renal/Respiratory system	ABLMS 125	Dr. Koltes	
6/3 PM	Scenarios	Poultry Farm	Dr. Koltes	Quiz 2; 1- page debate outline; Laboratory reports due
6/6 AM	Immune system	ABLMS 125	Dr. Koltes	
6/6 PM	Blood smears and Blood cell counts	448 ASVM	Dr. Koltes	Discussions of debate topics
6/7 AM	Cardiovascular system	ABLMS 125	Dr. Koltes	
6/7 PM	blood draws, centrifugation, and diagnostics	Poultry Farm	Dr. Koltes	Quiz 3
6/8 AM	Nutrition and Digestion	ABLMS 125	Dr. Williams	
6/8 PM	Digestive Lab	Poultry Farm	Dr. Williams	
6/9 AM	Endocrinology/Reproduction	ABLMS 125	Dr. Williams	
6/9 PM	Glucose Challenge Lab	448 ASVM	Dr. Williams	Quiz 4
6/10 AM	Embryo development lecture and lab	448 ASVM	Dr. Williams	Quiz 5
6/10 PM	Student Presentations	ABLMS 125	Dr. Williams	Lab reports due