

## Avian Health, AnSci 512 Lecture and Laboratory

May 14 to May 25, 2018

Instructors: Mick Fulton (MSU), Maria Arendt (UW), Ron Kean (UW), Rob Porter (UMn)

### Objectives:

- To give students a better appreciation for the origins of disease, methods to control infections through immunological function, vaccination, sanitation, biosecurity, and regulatory agency response.
- To give students a clearer understanding of normal and abnormal signs as caused by disease.
- To explore the microbial world of infectious disease.
- To understand your role in the transmission of disease.
- To develop a visual understanding of gross lesions caused by disease.

### Lecture Schedule

8:30 to 11:30 AM, Room 209 Animal Science Building

Date	Topic
May 14	Biosecurity – before, during, and after a disease, NPIP Biosecurity plan, pest control
May 15	Sanitation and disinfectants, worker safety, zoonotic diseases
May 16	Immunology – innate, humoral, and cellular immunity, vaccines and vaccination
May 17	Epidemiology, disease surveillance, agency disease response, previous outbreaks
May 18	Exam 1
May 20	Bacterial diseases of poultry
May 21	Bacterial/Viral diseases of poultry
May 22	Viral diseases of poultry
May 23	Parasite diseases of poultry
May 24	Fungal and metabolic diseases of poultry
May 25	Exam 2 and Student lab presentations

### Laboratory Schedule

May 14 to May 24, 2018: All labs begin at 1:30 PM and continue until the assignment is completed.

Lab number, date	Topic	Location
Lab 1, May 14	Biosecurity	PRL
Lab 2, May 15	Sanitation, disease transmission	PRL
Lab 3, May 16	Normal bird anatomy, necropsy, sterile sampling	PRL
Lab 4, May 17	Bacteriology isolation and identification	PRL
Lab 5, May 18	Enzyme linked immunosorbent assay	1056 An. Sci.
Lab 6, May <b>21</b>	<b><i>Vaccine and immunology</i></b>	<b>WVDL</b>
Lab 7, May <b>22</b>	<b><i>Fixed specimen disease identification</i></b>	<b>WVDL</b>
Lab 8, May <b>23</b>	<b>Flock daily mortality necropsy, abnormal anatomy</b>	<b>WVDL</b>
Lab 9, May <b>24</b>	<b><i>Coccidiosis</i></b>	<b>PRL</b>
Lab 10, May <b>25</b>	Lab reports. Student presentation	209 An. Sci.

## Avian Health, AnSci 512 Lecture and Laboratory

### **Laboratory Biosecurity Measures:**

Laboratory will meet in the Poultry Research Lab (PRL) except where noted. The PRL is located, two buildings west of An. Sci. Upon entering PRL facilities where chickens are housed (excluding classroom), shoe covers/booties and white lab coats must be worn. Students must have a fresh set of clothes and have showered since previous bird contact.

On days of the trips to the Wisconsin Veterinary Diagnostic Lab (WVDL), no one is allowed in the PRL wearing any clothes or unprotected shoes worn at the WVDL. Any results from lab procedures at the PRL should be recorded before going to the WVDL.

### **Final Lab Report:**

Each student group will present a PowerPoint presentation of results. Results should include methods and findings in lab 1, 2, 4, 6, 7, and 8. 100 points will be assigned for the presentation. The points will be equally distributed for: 1. Presentation; 2. Experimental designs used; 3. Evidence or results gathered properly; 4. Interpretation of results. Each student will be given no more than 15 minutes to present their findings in a formal presentation. A 5 minute question period will follow. Scores for the presentation will be based on instructor and peer evaluations.

### **Grading:**

Lecture: Each of the two lecture exams is worth 100 points.

Lab: 10 points will be given for attendance of each lab and completion of lab activities for a total of 100 points. There will be no make-ups and no excuses provided for absences due to the condensed nature of the course.

Final Lab Report: The final laboratory report will be 100 points.

Final Course Grade: A total of 400 points are available for the entire course. A final grade will be based upon accrual of those points. The instructor reserves the right to grade on a curve.

### **Code of Conduct:**

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to [studentconduct.wiscweb.wisc.edu/academic-integrity/](http://studentconduct.wiscweb.wisc.edu/academic-integrity/).

### **Accommodations:**

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodation for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA.