## **Avian Health 512**

May 15-26, 2017 8:30-11:30 in room 209 Animal Science Building

Instructor: Mark E. Cook and Mick Fulton

Phone cell: 608-212-5874 (Cook); 517-353-3701 (Office. Mick)

Email: mcook@wisc.edu; fulton@dcpah.msu.edu

Objectives: To give students a better appreciation for the origin of diseases, methods to control infections through sanitation and immunological function, and regulatory agencies involved. To give the students a clearer understanding of normal and abnormal pathology, and the causes of infectious diseases.

May	15	1	Occupational health and safety
May	15	2	Introduction, surveillance, regulation
May	15	3	Major historical outbreaks
May	16	4	Zoonosis
May	16	5	Zoonosis
May	16	6	Sanitation
May	17	7	Sanitation
May	17	8	Disease prevention/break management
May	17	9	Disinfectants/disinfestants
May	18	10	Immune defense
May	18	11	Immune defense
May	18	12	Immune regulation of growth
May	19	13	Exam
May	19	14	Vaccination/vaccine
May	19	15	Vaccination/vaccine
May	22	16	Bacteria diseases
May	22	17	Bacteria diseases
May	22	18	Bacteria diseases
May	23	19	Bacteria diseases
May	23	20	Bacteria diseases
May	23	21	Viral diseases
May	24	22	Viral diseases
May	24	23	Viral diseases
May	24	24	Viral diseases
May	25	25	Viral diseases
May	25	26	Protozoa
May	25	27	External/internal parasites
May	26	28	Mycotic infections
May	26	28	Field problems
May	26	28	Exam

Grading: Each exam is worth 100 points, and attendance at each lab is worth 10 points with no excuses. The report at the final laboratory session will be 100 points, for a total of 400 points. Grading is on a 10 point scale.

For graduate students taking the course for graduate credit, graduate students are also required to work independently in their research project during the lab section. The experiments and final report during the two-week sections is expected to be of a higher quality than projects conducted by undergraduate groups. Each graduate student will submit a one-page proposal for their research project by the 3<sup>rd</sup> day of class. They will complete this project independently during the remaining course period. During the last day presentation period, the graduate student will report their project for separate evaluation in place of group presentation. This presentation will be judged independently for the 100 point lab assignment.

\*Please plan to bring a pair of old shoes that can be stored at the poultry lab. They must be covered toe shoes like tennis shoes.

May 15-26, 2017

Objectives: To explore the microbial world of infectious disease. To understand your role in the transmission of disease. To develop a visual understanding of abnormal pathology.

Instructor: Mark E. Cook

Phone: cell 608-212-5874 Home 608-233-1020 Email: mcook@wisc.edu

Laboratory 1, May 15, Normal bird Necropsy, sterile sampling, PRL

Laboratory 2, May 16, Sanitation, transmission. PRL

Laboratory 3, May 17, Biosecurity lab PRL

Laboratory 4, May 18, Bacteriology isolation identification

Laboratory 5, May 19, Enzyme linked immunoabsorbent assay, Room 1056 An Sci

Laboratory 6, May 22, Cocci lab

Laboratory 7, May 23, Vaccine/immunology lab PRL

Laboratory 8, May 24, WVDL mortality necropsy, Diagnostic lab, With Dr. Fulton Laboratory 9, May 25, Fixed specimen disease identification. Diagnostic Lab, Dr. Porter Laboratory 10, May 26, Lab reports. Student presentations. Begin after class and continue until complete around 3pm.

Laboratory will meet in the Poultry Research Lab (except where noted), two buildings west of An. Sci. from 1:30 (unless notified otherwise) until completed. On days of the trips to the diagnostic lab, no one is allowed in the Poultry lab wearing any clothes or unprotected shoes worn at the diagnostic lab. Any results from lab procedures at the poultry lab should be recorded before going to the diagnostic lab.

Grading: 10 points will be given for attendance of each lab. There will be no make-ups and no excuses provided for absences. Total 100 points.

Each student group will present a powerpoint presentation of results. These results should include methods and findings in lab 1, 2, 4, 6, 7, and 8. 100 points will be assigned equally 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. These scores will be based on instructor and peer evaluations according to the attached sheet.