

TENTATIVE
ANIMAL SCIENCES 511
BREEDER FLOCK & HATCHERY MANAGEMENT
May 29 – June 9, 2017

Course Syllabus

Course Coordinator Ron Kean (rpkean@wisc.edu 608/262-8807)

Other Course Instructors Sally Noll, (Univ. of Minnesota)
 Ian Rubinoff, DVM, (HyLine North America)
 Mike Wineland (North Carolina State University)

Class meets in 212 Animal Sciences Monday through Friday, unless otherwise noted.

Labs and lectures will be interspersed throughout the days. Attendance is expected during all labs and lectures. Participation in discussion and problem solving sessions is also expected.

Grading:

Exam 1	(Fri., June 2)	100 points
Exam 2	(Tues. June 6)	100
Exam 3	(Fri., June 9)	100
Topical Paper Discussion		40
Problem set		40
Participation		<u>20</u>
Total		400 points

Grading Scale:

A	≥ 90%
B	≥ 80%
C	≥ 70%
D	≥ 60%
F	< 60%

BIOSECURITY All students need to be away from poultry for 5 days prior to the field trip.

TENTATIVE LECTURE SCHEDULE

<u>Date</u>	<u>Time</u>	<u>Topic</u>	
May 29	8:30-10	Course introduction / Introduce Problem Sets Introduction to artificial incubation and hatching History of artificial incubation and hatching	Kean
	10-12	Shell conductance	Wineland/Kean
	1-3	Embryonic development (lecture)	Wineland
May 30	8:30-10:30	Physiological requirements for incubation	Wineland
	10:30-12	Pre-incubation handling of hatching eggs	Wineland
	1-2:30 2:30- 4	Hatchery layout, scheduling, recordkeeping Incubation of other species	Kean Kean
May 31	8:30-11	Cleaning and disinfecting	Wineland
		Microbial monitoring	Wineland
	11-12	Post hatch chick quality	Kean
	1-2 2-3	Chick servicing (lecture) Turkey Breeder Economic Modeling	Kean Kean
June 1	6 am- 5 pm	Field Trip to Hatchery and Processing Plant	Kean
June 2	8:30-9:30	Exam 1	
	9:30-11	Embryonic development lab	Wineland
	11-12	Personnel management and contracts	Kean
	1-2:30	Introduction to poultry production systems	Kean
	2:30-4	Chick quality lab Hatch residue breakout Chick servicing (lab)	Kean/Wineland

Handout papers for reading for next week's discussion (Kean for Noll)

June 5	8:30-10	Organization, genetic flow in the poultry industry Breeder selection strategies	Kean Kean
	10-11	Bird behavior and relation to management decisions	Kean
	11-12	Topic to be determined	
	1-2:30	Introduction to Lighting Program Concepts for breeding poultry/Group Discussion*	Noll
	2:30-3:30	Introduction to artificial insemination	Noll
June 6	8:30-9:30	Exam 2	
	9:30-10:30	Labs – bird handling, flock behavior, AI techniques [students will split into groups and rotate)(PRL)]	Noll & Kean
	10:30-11	Flock behavior discussion (PRL classroom)	Kean
	11-12	NPIP and breeder farm biosecurity	Noll
	1-2 2:00-3:30	Environmental Considerations for Breeders Introduction to Feed Restriction Concepts in Breeding Poultry and Group Discussion*	Noll Noll
June 7	8:30-12	Layer breeder flock management	Rubinoff
	1-2	Live evaluation of broiler breeders	Kean
	2-4	Equipment overview, breeder facility setup Lab: Tools to use in poultry management and housing - vaccination, environment monitoring	Noll Noll
June 8	8:30-9:30	Broiler breeder rearing and flock mgmt.	Noll
	9:30-12	Turkey breeder rearing and flock mgmt	Noll
	1-2 2-4	Collect semen Semen handling techniques, quality testing	Noll & Kean Noll & Kean
June 9	8:30-9:30	Exam 3	
	9:30-11:30	Student/group reports Course Evaluations	Noll / Kean

*Active Learning Exercise