ANFS 422 Fall 2015
POULTRY PRODUCTION LABORATORY

Lab: Thursday 12:30 to 2:30 pm
103 Newton Building

Instructor: Mr. Robert Alphin        Dr. Hong Li
007 Allen Laboratory    046 Townsend Hall
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Department of Animal & Food Sciences

Office Hours: Open door policy, but recommend making an appointment
Tues. 11:00 am-1:00 pm or with an appointment

Course Description:

ANFS 422 integrates principles of anatomy, physiology, nutrition, genetics, reproduction, housing, health, biosecurity, bird management, litter and waste management, food safety, processing, and welfare as they relate to the poultry industry. This course is intended to utilize the core concepts of the Animal and Food Sciences Curriculum as it relates to poultry production. Laboratory periods are designed to reinforce course content by development of “hands on” skills used in poultry production. This course has considerable out-of-class time commitment consisting of individual and group work to reinforce concepts learned in class using real-world examples.

Special Note for Students

ANFS 421 Poultry Production is now a 3 credit lecture only course and ANFS 422 Poultry Production Laboratory is the 1 credit laboratory course associated with the lecture course. To qualify as a production course, both courses are required. The lecture can be taken online or in-person, but the laboratory must be taken in-person.
**Program Student Learning Outcomes:**

1. Students will use critical thinking and reasoning, skeptical inquiry and the scientific approach to solve problems.

2. Students will demonstrate oral communication skills important for communicating scientific ideas.

3. Students will demonstrate written communication skills important for communicating scientific ideas.

4. Students will demonstrate knowledge of the major core concepts in the animal and food sciences.

5. Students will demonstrate an understanding of different perspectives on ethics, values and the roles and use of animals in society. Students will be able to discuss contemporary ethical and moral issues associated with poultry production.

**Course Student Learning Outcomes:**

1. Students will demonstrate, integrate and apply knowledge of the major core concepts of Animal and Food Sciences as they apply to the poultry industry through quizzes and performing a semester project involving the class acting as contract growers to raise a flock of broilers for a commercial broiler company.

2. Students will demonstrate oral communication skills important for communicating scientific ideas by presenting a summary of their group semester project on the results of the class flock grow-out.

3. Students will demonstrate effective writing skills important for communicating scientific ideas by writing a semester project report on the results of the class flock grow-out.

**Grading:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab quizzes</td>
<td>50</td>
<td>A</td>
<td>93%</td>
</tr>
<tr>
<td>Semester Project</td>
<td></td>
<td>A-</td>
<td>90%</td>
</tr>
<tr>
<td>Participation</td>
<td>25</td>
<td>B+</td>
<td>87%</td>
</tr>
<tr>
<td>Group oral report</td>
<td>30</td>
<td>B</td>
<td>84%</td>
</tr>
<tr>
<td>Grow-out report</td>
<td>35</td>
<td>B-</td>
<td>81%</td>
</tr>
<tr>
<td>Essay</td>
<td>35</td>
<td>C+</td>
<td>77%</td>
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Lab participation: 25 C 74%
Total: 200 C- 70%
D+ 67%
D 64%
D- 60%
F 59%

Group Work: You will be assigned to lab groups for most of the course. Your group (as a whole) will be responsible for seeing that activities are completed; however, you will complete some assignments individually. Your activities will be monitored through the use of a house log. You should make entries in the log as individuals and you are free to comment as you wish. Decisions on when to work at the house on lab activities should include input from all group members. Remember that all times will not please all members and you should compromise. Tasks should be shared among all group members. If at any time, you feel that your group is not working well together and members are not contributing equally, please contact the instructors immediately.

Discovery Learning Project: A major part of your grade in this course is determined by a group semester project. Each group will follow 25 chicks during the flock grow-out. Students will collect and critically evaluate data pertaining to their group chickens and the flock as a whole, at weekly intervals throughout the flock grow-out. At the end of the semester, students will give an oral group presentation and submit an individual flock grow-out report of their findings. Semester project grading will be based on individual contributions to the group (25 pts), a group oral presentation (30 pts), and two individual written assignments (35 pts each/ 70 pts total) for a grand total of 125 points.

Important dates: Course schedule will be passed out in class and available on the Sakai course website. Outside of class, checking on broilers in the Broiler House, 2-3 times per week from 10/1-11/18.

Labs: Labs are scheduled from 12:30 to 2:30 pm and will start in room 103 in the O.A. Newton Bldg unless otherwise listed on the class schedule. The labs will require “hands on” experience and thus you are required to dress appropriately and participate. Students should make every effort to arrive on time for each lab.

Fieldtrip #1: Mountaire Farms-visit hatchery, broiler farm with tunnel ventilated broiler houses, and processing plant; Leave Newton Bldg at 7:30 am, on 11/19; return ~4:30 pm; 10 bonus points for going on fieldtrip

Fieldtrip #2: Visit Commercial Layer Complex with egg processing plant; during lab period; Leave Newton Building at 12:30 pm, return at 2:30 pm

Lab Participation: Attendance is mandatory. Participation is essential to the success of this course and it is included in your grade. You will be expected to contribute to the laboratory (25 pts).
**Lab Assignments:** Throughout the semester there will be several short-term assignments for the lab. These include but are not limited to data collection assignments, data evaluation assignments, reflective essay assignment and group oral presentation.

**Textbook:** No textbook is required. For students looking for an excellent reference book, *Commercial Chicken Meat and Egg Production Manual* by Donald D. Bell and William D. Weaver, Jr. is recommended and will also be on reserve in the library.

**Quizzes:** Five quizzes will be given during lab (10 pts each/50 pts total). Only under extenuating circumstances will make up quizzes be administered. You must schedule a make-up quiz BEFORE the regular quiz date (must have advanced notice and written excuse).

**Transportation:**
Allow sufficient time so that you can reach the Newton Building on the College of Agriculture and Natural Resources Farm. UD shuttle bus service provides transportation to Townsend/Worrilow Hall en route to the Field House. Check current bus schedule for actual times. There is no subsequent bus service to the farm. You will have to walk or ride a bike or there is parking at the Newton Building.

**Academic Dishonesty:**

Academic dishonesty of any form will not be tolerated. You are encouraged to become familiar with the University’s Policy of Academic Dishonesty found in the “Student Guide to Policies.” Copies of it may be obtained online. The content of the guide applies to this course.

**Disruptive Behavior:**

Disruptive behavior, such as talking during lectures, consistent late arrival or early departure, eating, etc., will be the basis for asking a student to leave a class. Persistent disruptive behavior will result in the student being dropped from the class and denied attendance.

**Lab Topics:**
Broiler Management
Broiler House Management
Broiler House Set-up
Broiler House Computer Training
Hatch and Placement of Chicks
Post Mortem Examination
Disease Diagnostics/Biosafety Training
Water Vaccination
Field Trips to Commercial Broiler Company and Commercial Table-Egg Layer Farm
Semester (Grow-Out) Project Guidelines

Poultry Production Lab Fall 2015

Background
The class will be growing a flock of broilers for Mountaire Farms. Each group will select 25 broiler chicks. The group will monitor their broilers and collect data from their chickens throughout the grow-out. The goal of this project is to learn how broilers are managed on a poultry farm and to learn about the everyday problems of broiler producers. The best way to learn about this process is by actually raising a flock. Students and groups will weekly collect and evaluate data pertaining to their broilers and the entire flock throughout the grow-out. At the end of the grow-out, students will organize and synthesize the information and present it both in a group oral presentation and an individual written report.

Grading (125 points total)
Individual contributions to the group: Students who are present at lab, take an active role in data collection, and are evaluated well by the other group members will receive full credit. (25 pts)

Oral presentation: Groups will informally report to the class the flock weight, on the week the class has to weigh the class flock. Groups will prepare a report for class and give a 15 minute presentation synthesizing the information they learned throughout the semester. Presentations will focus on the main aspects of their project. Prepare handouts of presentation for classmates and instructor. All team members will receive the same grade. (30 pts).

Written essay and report: Each student will prepare an individual reflective essay (35 pts) and grow-out report (35 pts) that will be submitted during the semester. These written assignments will document the course semester flock grow-out and will also contain a reflection component on the student’s undergraduate experience.

Reflective Writing Essay (750 words): Background: Capstone courses are designed to provide students with the opportunity to synthesize and apply the information learned in the required core courses in your major. The purpose of this assignment is to have you reflect on your experiences and their culmination through this capstone course. Assignment: Write an essay of 750 words or more to address the following questions: What have been the most important things that you have learned about animal science OR about food science, AND about yourself as a result of this capstone experience? How will you apply what you have learned to your future? (35 pts)

Grow-out Report: This report will have a description of the grow-out of your broilers and the pertinent information collected during the semester. Feel free to use graphs, tables or any other presentation aides. (35 pts)
  ▪ Assessment of your broilers performance compared to the flock average and to the projected average.
  ▪ Predict how the flock performance would impact your earnings if you were a grower.
- Brief history/diary of important events during flock grow-out