

## Animal Science 314: Poultry Nutrition

### Instructors:

Dr. Mike Persia

Iowa State

[mpersia@iastate.edu](mailto:mpersia@iastate.edu)

Dr. Carl Parsons

Illinois

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Dr. Todd Applegate

Purdue

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### Industry Nutritionists:

Dr. Mamduh Sifri

ADM

**Lecture:** Monday thru Friday 8:30 to 11:30

**Laboratory:** Monday thru Friday 1:30 to 4:30

### Student Outcomes:

At the completion of this course, students will be able to

- describe the digestive anatomy and physiology of poultry species,
- understand the practical aspects of carbohydrate, fat and protein digestion and absorption by poultry
- become familiar with the vitamins and minerals essential to poultry growth and development
- learn the process of feed formulation for poultry diets
- Interact with poultry nutrition specialist through class and field trip interactions
- Develop an understanding of poultry research

### Grading:

Your final grade for this course will be out of 400 points:

|                   |                   |
|-------------------|-------------------|
| In class quizzes: | 140 points        |
| Lab write up:     | 60 points         |
| Presentation:     | 50 points         |
| Exam 1:           | 75 points         |
| <u>Exam 2:</u>    | <u>75 points</u>  |
| <b>Total</b>      | <b>400 points</b> |

Attendance of class is required as this class is only two weeks long missing class will negatively affect the learning outcomes. Class participation is an important aspect of active learning and will be beneficial to the student. Missed in class evaluation (quizzes and exams) cannot be made up.

Final grades will be assigned as follows:

|    |           |                  |
|----|-----------|------------------|
| A  | 93-100%   | (372-400 points) |
| A- | 90-93%    | (360-371 points) |
| B+ | 87-90%    | (348-359 points) |
| B  | 83-87%    | (332-347 points) |
| B- | 80-83%    | (320-331 points) |
| C+ | 77-80%    | (308-319 points) |
| C  | 73-77%    | (292-307 points) |
| C- | 70-73%    | (280-291 points) |
| D  | 60-70%    | (240-279 points) |
| F  | Below 60% | (< 240 points)   |

**Labs and Field Trips:**

This course will require involvement in daily lab sessions, which will be held at the Wisconsin Poultry Farm. We will also be taking field trips to visit poultry producers in the area. Please dress appropriately for all possible activities at the farms and mill, including clean close-toed shoes and long pants.

Animal production involves various substances, procedures and management techniques that are odorous, please be aware of this and plan accordingly when you visit the farms.

**Biosecurity:**

The Wisconsin poultry farm maintains a strict biosecurity policy to enter the facilities. Please bring to my attention any potential contact that you might have with **commercial, research, hobby or pet birds** that would interfere with compliance to the biosecurity policy.

**Academic Honesty:**

You are expected to practice academic honesty in every aspect of this course and all other courses. Students who engage in academic misconduct are subject to Midwest Poultry Consortium and/or University disciplinary procedures, as well as consequences with regard to this course. Forms of academic dishonesty include but are not limited to copying course work (or allowing others to do so), paying or being paid for course work, or plagiarism.

**Students with special needs:**

Any student who may require an accommodation under such provisions should contact me as soon as possible. No retroactive accommodations will be provided in this class.

ANS 314 Poultry Nutrition

| Week 1 |    | Instruction                    | Instructor          | Assignment   |
|--------|----|--------------------------------|---------------------|--------------|
| 21-May | am | Intro and protein              | Dr. Parsons         |              |
|        | pm | Broiler lab 1 and 2            | Drs. Parsons/Persia |              |
| 22-May | am | energy                         | Dr. Parsons         | quiz 1       |
|        | pm | feed formulation               | Dr. Persia          |              |
| 23-May | am | anatomy/physiology             | Dr. Persia          | quiz 2       |
|        | pm | diet mixing/turkey lab 3       | Dr. Persia          |              |
| 24-May | am | feed manufacturing             | Dr. Persia          | quiz 3       |
|        | pm | feed mill tour/McFarlane's     | Dr. Persia          |              |
| 25-May | am | minerals/fat soluble           | Dr. Persia          | quiz 4       |
|        | pm | presentations water soluble    | Class               | presentation |
| Week 2 |    | Instruction                    | Instructor          | Assignment   |
| 28-May | am | feed additives                 | Dr. Persia          | exam 1 due   |
|        | pm | current issues discussion /BBQ | Dr. Persia/class    |              |
| 29-May | am | microflora                     | Dr. Persia          | quiz 5       |
|        | pm | current topics-discussion      | Dr. Sifri           |              |
| 30-May | am | current topics                 | TBD                 | quiz 6       |
|        | pm | broiler/turkey lab completion  | Dr. Persia          |              |
| 31-May | am | environmental nutrition        | Dr. Applegate       | quiz 7       |
|        | pm | feed formulation               | Dr. Applegate       |              |
| 1-Jun  | am | Final Exam                     | Dr. Persia          | final exam   |
|        | pm |                                |                     | Labs due     |