

Poultry Products Technology, Summer 2025 Course Syllabus

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Week 1: May 19 - 23, 2025

Week 2: May 27 - 30, 2025

Class hours: 8:00 am – 6:00 pm, with a 1.15 hr lunch

Lecture: Farm Bureau Pavilion classroom in Kildee Hall

Laboratory: Location(s) to be announced in lecture.

Format: In-Person

Credits: 3

Office Hours: Please request (via email) a meeting with each instructor as needed.

Student Outcomes: At the completion of this course, students should be able to:

1. Understand basic principles and technologies involved in producing eggs, egg products and muscle-based products.
2. Understand the role of chemical and physical processes that go into producing a high-quality product.
3. Quantitatively measure quality attributes of the different products produced in the laboratory segments.
4. Understand basic microbiological principles related to product quality and food safety and why certain ingredients are needed in some products.

Expectations: Class participation is an important aspect of active learning and is directly beneficial to the student and their peers. The best way to get the most out of this class is participation, asking questions, and networking with your peers and guest speakers. The poultry industry is small and offers many job opportunities. As Poultry Science Departments and classes are disappearing across the country, this class is an excellent way to get your foot in the door to discover an interest you didn't know you had, or also help you find what you do not want to do for a career. When Canvas or any online/ email option is used to submit class work, it is the sole responsibility of the student to ensure documents are submitted on time and in a readable format. Any malfunction is the responsibility of the student and students must clearly communicate that the final form has been submitted when submitting over email.

The nitty gritty: Missed in-class evaluation (quizzes and exams) cannot be made up and students will receive a zero. If you have an emergency, you must email the instructor before class or lab begins. Lab attendance will be monitored, and full participation is required. Early departure from lab is disrespectful to the instructor and peers and will not be tolerated. Late work is not accepted and will receive a zero. Syllabus and points awarded are subject to change.

Dress code: Clean, close-toed shoes, and long pants. Clothes that have been in contact with other livestock or hobby animals must be laundered before being worn at any livestock farm. With the lab sections, please be mindful you may get dirty.

Cell Phone policy: It is expected of students not to utilize their cell phones during class or lab work, unless during a break period. Cell phone use is extremely distracting not only for the instructor but other classmates as well. COE is taking a strong stance on cell phone usage. If a student is found to be using a cellphone during class, the student will be given a verbal warning by the instructor. If the student is found to be using a cellphone for a second time, the COE administrative team will be informed and action will be taken. If you have a pre-determined call that you need to make or answer, please alert the instructor ahead of time.

Academic Honesty: All students are expected to practice academic honesty in every aspect of this course, including homework, quizzes, projects, and exams. Please familiarize yourself with the ISU Student Information Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures, as well as consequences regarding 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. See the Conduct Code at <http://www.studentconduct.dso.iastate.edu/> for more details.

Students with special needs: Iowa State University complies with the American with Disabilities Act and Section 504 of the Rehabilitation Act. Any student who may require an accommodation under such provisions should contact me as soon as possible, as no retroactive accommodations will be provided in this class. You will need to provide documentation of your disability to the Student Disability Resources (SDR) office, located on the main floor of the Student Services Building, Room 1076, 515-294-7220.

Respect and Professionalism: You are expected to treat your instructor and all other participants in the course with courtesy and respect. Your comments to others should be factual, constructive, and free from harassing statements. You are encouraged to disagree with other students, but such disagreements need to be based upon facts and documentation (rather than prejudices and personalities). It is the instructor's goal to promote an atmosphere of mutual respect in the classroom. Please contact the instructor if you have suggestions for improving the classroom environment. It is preferable if students discuss issues directly with the instructor, however, students may also contact the instructor by email or leave a note in the instructor's mailbox.

Free Expression: Iowa State University supports and upholds the First Amendment protection of freedom of speech and the principle of academic freedom to foster a learning environment where open inquiry and the vigorous debate of a diversity of ideas are encouraged. Students will not be penalized for the content or viewpoints of their speech if student expression in a class context is germane to the subject matter of the class and conveyed in an appropriate manner.

Discrimination and Harassment: Iowa State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. Veteran. Students engaging in any negative behaviors in this class, or in Animal Science facilities, are subject to appropriate disciplinary action by the course instructor, and will also have their cases referred to the Dean of Students Office. Any student who has concerns about such behavior should contact the course instructor, Student Assistance at 515-294-1020 or email dso-sas@iastate.edu, or the Office of Equal Opportunity and Compliance at 515-294-7612.

Religious Accommodation: Iowa State University strives to reasonably accommodate students who's sincerely held religious beliefs or creed conflict with academic requirements. Accommodation requests must be made proactively. The process for requesting an accommodation is interactive and the process must be initiated by the individual seeking the accommodation. For optimal consideration, students should inform instructors as soon as possible in the semester of a course conflict. It is recommended that the student and instructor discuss the request in person and then document the resolution in an email format. Assistance throughout the process for all parties involved is available through the Office of Equal Opportunity at 515-294-7612.

Disability Accommodation: Iowa State University is committed to assuring that all educational activities are free from discrimination and harassment based on disability status. Students requesting accommodations for a documented disability are required to meet with staff in Student Accessibility Services (SAS) to establish eligibility and learn about related processes. Eligible students will be provided with a Notification Letter for each course and reasonable accommodations will be arranged after timely delivery of the Notification Letter to the instructor. Students are encouraged to deliver Notification Letters as early in the semester as possible. SAS, a unit in the Dean of Students Office, is in room 1076 Student Services Building or online at www.sas.iastate.edu. Contact SAS by email at accessibility@iastate.edu or by phone at 515-294-7220 for additional information.

Academic Misconduct in any form is in violation of Iowa State University *Student Disciplinary Regulations* and will not be tolerated. This includes, but is not limited to: copying or sharing answers on tests or assignments, plagiarism, and having someone else do your academic work. Depending on the act, a student could receive a "0" grade on the test/assignment, "F" grade for the course, and could be suspended or expelled from the University. See the Conduct Code at www.dso.iastate.edu/ja

Contact Information: If you are experiencing, or have experienced, a problem with any of the above issues, email academicissues@iastate.edu.

Evaluation: Your overall grade for this course will consist of the following weighted assessment categories:

Exam 1	25%
Exam 2	25%
Exam 3	25%
Exam 4	25%
Total	100%

Grade Scale: Your overall course grade will be based on the summation of weighted assessment categories. The proportion of your overall course grade earned within each weighted assessment category will be based on the total points earned as percentage of total points possible. Letter grades will be assigned as A: 93-100; A-: 90-92.9; B+: 87-89.9; B: 83-86.9; B-: 80-82.9; C+: 77-79.9; C: 73-76.9, C-: 70-72.9; D+: 67-69.9; D: 60-66.9; F: <60.

Course Topic Schedule*:

Week 1 – Eggs/Egg Products; Muscle Food Products – Cressman, Tarté				
Monday, May 19	Tuesday, May 20	Wednesday, May 21	Thursday, May 22	Friday, May 23
Introductions/Syllabus (Cressman) Egg Industry Egg Formation & Structure Shell Egg Composition & Processing Egg Grading Egg Grading (lab)	Shell Egg Quality Further Processed Products Egg White Foaming (lab) Egg White Functionality (lab) Emulsification (lab)	Exam 1 (Cressman) Slaughter, Inspection & Meat Grading Fabrication and Myology Meat Lab Facilities Tour	Poultry Fabrication (lab) Muscle Form & Function Post-mortem Conversion of Muscle to Meat Fresh Meat Quality	Ground Meat Patties (lab) Meat Quality (lab) Exam 2 (Cressman) Key Concepts (Tarté) Protein Functionality Binding Added Water Fermented & Acidic Meats The Curing Process Thermal Processing Basics
Week 2 – Muscle Food Products; Food Safety (Meat and Eggs) – Tarté, Unruh				
Monday, May 26	Tuesday, May 27	Wednesday, May 28	Thursday, May 29	Friday, May 30
<i>Class does not meet</i>	Bratwurst, Sausage, and Enhanced Products (lab) Refine Key Concepts Other Non-Meat Ingredients Industry Example Problems Shelf-Life Extension & Microbial Lethality Lipids Consumers	Cooked, Smoked, and Cured Products (lab) Exam 3 (Tarté) Intros (Unruh) General Microbiology Egg Microbiology	Laboratory (Grp A / Grp B) Egg Safety (Grp B / Grp A) Informal Discussion Meat Microbiology & HACCP Sanitation Sanitation Videos	Laboratory (Grp A / Grp B) Summary and Exam Review Student Presentations Exam 4 (Unruh)

*This table presents only the general topics for each day, as well as which days you can expect an exam. Additional lecture, lab, exam, quiz, and assignment details will be specified (via email or Canvas announcement) by the appropriate instructor.