

## Poultry Products Technology, Summer 2023 Course Syllabus

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**Week 1:** May 15<sup>th</sup>-19<sup>th</sup>, 2023

**Lecture:** Monday – Friday: 08:30 am – 12:00 pm (CDT)

**Laboratory:** Monday – Friday: 01:15 pm – 05:45 pm (CDT)

**Week 2:** May 22<sup>nd</sup>-26<sup>th</sup>, 2023

**Lecture:** Monday – Friday: 01:30 pm – 05:45 pm (CDT)

**Laboratory:** Monday – Friday: 08:00 am – 12:15 pm (CDT)

**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 (<https://canvas.iastate.edu/>) 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.

**Course Technology:** Poultry Products Technology is an in-person course; however, some course materials – syllabus, announcements, videos, websites, articles, quizzes, exams, and other assignments – may be organized and made available on Canvas. You must have access to a computer with the required hardware (web browser) and software applications (Windows 7/8/10, Vista or Macintosh OS X; Mozilla/Firefox 10 or greater or Safari 1.x or greater or Firefox; Microsoft Office applications; and Adobe Reader) to access and download on-line learning content. Viewing content

on most smart phones and tablets is supported without an App. Opera-mobile browser is recommended with Android devices. However, it is not recommended to use a wireless internet connection during online assignment submissions, as this type of connection can be unreliable.

For help with your password, university email, Canvas, or any other technology issues, questions, or requests, contact the ISU Information Technology Services (<https://www.it.iastate.edu>) for support:

Phone: (515) 294-4000

Email: [solution@iastate.edu](mailto:solution@iastate.edu)

Portal: <https://iastate.service-now.com/it>

Baseline technical skills required to be successful in this course include basic computer and web-browsing skills, as well as proficiency with Canvas. For questions about specific Canvas functionality, see the MyCanvas Student page (<https://canvas.iastate.edu/courses/23702>) or call the Canvas Support Line (Call (515) 294-4000 then press 2, press 1).

### **Required Equipment:**

Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection.

Other: a mobile device (smartphone or tablet) or landline to use for multifactor authentication:

<https://www.it.iastate.edu/mfa>.

### **Required Software:**

Microsoft Office 365: Microsoft Office 365 for Windows & Mac can be downloaded for FREE by Iowa State University students (requires an active ISU email address):

<https://www.techcyte.isubookstore.com/shop/tc/software/office-365>.

**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 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. 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 the instructor(s) 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. Phone: (515) 294-7220.

**Respect and Professionalism:** You are expected to treat your instructor(s) 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(s) or MPC staff if you have suggestions for improving the classroom environment. It is preferable if students discuss issues directly with the instructor(s) or MPC staff.

**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(s), Student Assistance at (515) 294-1020 or email [dso-sas@iastate.edu](mailto: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 the instructor(s) as soon as possible in the semester of a course conflict. It is recommended that the student and instructor(s) 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(s). Students are encouraged to deliver Notification Letters as early in the semester as possible. SAS, a unit in the Dean of Students Office, is located in room 1076 Student Services Building or online at [www.sas.iastate.edu](http://www.sas.iastate.edu). Contact SAS by email at [accessibility@iastate.edu](mailto: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/or the *MPC Code of Conduct* 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](http://www.dso.iastate.edu/ja) for more details and a full explanation of the Academic Misconduct policies.

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

**The nitty gritty:** Late assignment submissions will not be accepted and will receive a zero, unless otherwise specified by the instructor. Additionally, your full participation in lecture and lab is expected. A missed lecture or lab is excusable, and any points associated with a missed lecture or lab may be made up, but only for sponsored activities. The student must provide signed official documentation of this sponsored event or forfeit all points associated with the missed lecture or lab. If you have an emergency, you must email the instructor before lecture or lab begins. Syllabus is subject to change.

**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 – Food Safety (Meat and Eggs) and Eggs/Egg Products – Dickson and Cressman				
Monday, May 15 <sup>th</sup>	Tuesday, May 16 <sup>th</sup>	Wednesday, May 17 <sup>th</sup>	Thursday, May 18 <sup>th</sup>	Friday, May 19 <sup>th</sup>
Informal Discussions / Intros General Microbiology Egg Microbiology Laboratory (Grp A / Grp B) Egg Safety (Grp B / Grp A)	Informal Discussion Meat Microbiology & HACCP Sanitation Sanitation Videos Summary and Review Laboratory (Grp A / Grp B) Exam Review (Grp B / Grp A) Student Presentations	Review <b>Exam 1</b> (Dickson) 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)	<b>Exam 2</b> (Cressman) Field Trip to Hawkeye Pride Breaking Plant
Week 2 – Muscle Food Products – Cressman, Scheffler, and Richards				
Monday, May 22 <sup>nd</sup>	Tuesday, May 23 <sup>rd</sup>	Wednesday, May 24 <sup>th</sup>	Thursday, May 25 <sup>th</sup>	Friday, May 26 <sup>th</sup>
Introductions/Syllabus Slaughter, Inspection & 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)	Key Concepts Protein Functionality Binding Added Water Fermented & Acidic Meats The Curing Process Thermal Processing Basics 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 Review <b>Exam 3</b> (Cressman) <b>Exam 4</b> (Richards) Review of Products and Interactive Lunch (lab)

\*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.