AnSc 3701 Poultry Products Technology, 3 Cr. SYLLABUS

Instructors:

Dr. Michael Cressman, Ohio State University, <u>cressman.2@osu.edu</u> Mr. Ethan Scheffler, Ohio State University, <u>scheffler.15@osu.edu</u> Dr. Anup Kollanoor Johny, University of Minnesota, <u>anupjohn@umn.edu</u> Dr. Ryan Cox, University of Minnesota, <u>ryancox@umn.edu</u>

Scheduled Time/Dates:

Instructional Lectures: Hands-On Laboratory/Meat/Egg Handling sessions: Scheduled: Monday – Friday: 8:30 am – 12:00 pm (CDT) Monday – Friday: 1:15 pm – 5:45 pm (CDT) May 13th – May 24th, 2024

Locations:

Teaching Classroom – Haecker Hall 205 Teaching Lab - FScN 218; ABLMS Meats Lab

Instructional Time & Student Workload Assessment:

This course meets the UMN administrative policy for instructional time per course credit and student workload expectations.

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 musclebased 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 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. 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 Canvas page or call the Canvas Support Line (TBD).

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:

Required Software:

Microsoft Office 365

Scholastic Dishonesty

You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code: http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf) If it is determined that a student has cheated, the student may be given an "F" or an "N" for the course, and may face additional sanctions from the University. For additional information, please see: http://policy.umn.edu/education/instructorresp. The Office for Community Standards has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: https://communitystandards.umn.edu/avoid-violations/avoiding-scholastic-dishonesty. If you have additional questions, please clarify with your instructor for the course. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.

Disability Accommodation

The University of Minnesota views disability as an important aspect of diversity and is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center (DRC) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.

If you have, or think you have, a disability in any area such as, mental health, attention, learning, chronic health, sensory, or physical, please contact the DRC office on your campus (UM Twin Cities - 612.626.1333) to arrange a confidential discussion regarding equitable access and reasonable accommodations. Students with short-term disabilities, such as a broken arm, **can** often work with instructors to **minimize** classroom barriers. In situations where additional assistance is needed, students should contact the DRC as noted above. If you are registered with the DRC and have a disability accommodation letter dated for this semester or this year, please contact your instructor early in the semester to review how the accommodations will be applied in the course. If you are registered with the DRC and have questions or concerns about your accommodations, please contact your (access consultant/disability specialist). Additional information is available on the DRC website UM Twin Cities - https://diversity.umn.edu/disability/) or e-mail (UM Twin Cities - drc@umn.edu) with questions.

Sexual Harassment

"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents Policy: https://regents.umn.edu/files/policies/Sexual_Harassment_Sexual_Assault_Stalking_Relationship_Violence.pdf

Equity, Diversity, Equal Opportunity, and Affirmative Action

The University provides equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult Board of Regents Policy:

http://regents.umn.edu/sites/regents.umn.edu/files/policies/Equity_Diversity_EO_AA.pdf.

Mental Health and Stress Management

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website: http://www.mentalhealth.umn.edu.

Academic Freedom and Responsibility: for courses that do not involve students in research

Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled. * Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help. Contact the instructor, the Department Chair, your adviser, the associate dean of the college, or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost. [Customize with names and contact information as appropriate for the course/college/campus.] Language adapted from the American Association of University Professors "Joint Statement on Rights and Freedoms of Students".

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 <u>only</u> 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*:

| nd Eggs), Meat Science Key Cor | ncepts, & Field Trip – Johny and | Cox | | |
|---|--|---|---|--|
| Tuesday 5/14 | Wednesday 5/15 | Thursday 5/16 | Friday 5/17 | |
| Johny (lecture): | Exam 1 (Johny) | Cox (lab): | Exam2 (Cox) | |
| Informal Discussion | Student Presentations | Poultry carcass fabrication | | |
| Meat Microbiology & | Assignment submissions | Thigh deboning | Field Trip (Cold Springs, | |
| HACCP | | Chicken breast portioning | MN) | |
| Summary and Review | Meat Lab Facilities Tour | | 9:50 AM (in front of Haecker | |
| Exam Review | (Cox) | | Hall) | |
| | () | Cox (lecture): | | |
| Johny (lab): | Cox (lecture): | Refine Key Concepts | | |
| Egg Safety Lab (Groups) | | Other Non-Meat Ingredients | | |
| | • • | | | |
| | | Shelf-Life Extension & | | |
| | Fermented & Acidic Meats | Microbial Lethality | | |
| | The Curing Process | Lipids | | |
| | Thermal Processing Basics | Consumers | | |
| Week 2 – Egg and Meat Quality, Protein Functionality, and Processing – Cressman, Scheffler, Cox | | | | |
| Tuesday 5/21 | Wednesday 5/22 | Thursday 5/23 | Friday 5/24 | |
| | Exam 3 (Cressman) | Scheffler (lab): | Scheffler (lab): | |
| | | Bratwurst, Sausage, and | Cooked, Smoked, and Cured | |
| Further Processed | Scheffler (lab): | Enhanced Products | Products | |
| Products | | | | |
| | Meat Quality (lab) | · · · · · · · · · · · · · · · · · · · | Exam 4 (Cressman) | |
| Cressman (lab): | | | | |
| Egg White Foaming | Cressman (lecture): | | | |
| Egg White Functionality | ` | | | |
| Emulsification | | Fresh Meat Quality | | |
| | Fabrication and Myology | | | |
| | Tuesday 5/14 Johny (lecture): Informal Discussion Meat Microbiology & HACCP Summary and Review Exam Review Johny (lab): Egg Safety Lab (Groups) y, Protein Functionality, and Pro Tuesday 5/21 Cressman (lecture): Shell Egg Quality Further Processed Products Cressman (lab): Egg White Foaming Egg White Functionality | Tuesday 5/14Wednesday 5/15Johny (lecture): Informal Discussion Meat Microbiology & HACCP Summary and Review Exam ReviewExam 1 (Johny) Student Presentations Assignment submissionsJohny (lab): Egg Safety Lab (Groups)Cox (lecture): Key Concepts Protein Functionality Binding Added Water Fermented & Acidic Meats The Curing Process Thermal Processing Basicsy. Protein Functionality, and Processing - Cressman, Scheffler, C Tuesday 5/21Exam 3 (Cressman)Shell Egg Quality Further Processed ProductsScheffler (lab): Ground Meat Patties (lab) Meat Quality (lab)Cressman (lab): Egg White Foaming Egg White Functionality EmulsificationScheffler (lab): Slaughter, Inspection & Grading | Johny (lecture): Informal Discussion Meat Microbiology & HACCP Summary and Review Exam ReviewExam 1 (Johny) Student Presentations Assignment submissionsCox (lab): Poultry carcass fabrication Thigh deboning Chicken breast portioningJohny (lab): Egg Safety Lab (Groups)Meat Lab Facilities Tour (Cox)Cox (lecture): Refine Key Concepts Protein Functionality Binding Added Water Fermented & Acidic Meats The Curing Process Thermal Processing BasicsCox (lecture): Refine Key Concepts Other Non-Meat Ingredients Industry Example Problems Shelf-Life Extension & Microbial Lethality Lipids Consumersy, Protein Functionality, and Processing – Cressman, Scheffler, CoxScheffler (lab): Bratwurst, Sausage, and Enhanced Productsy, Protein Functionality Further Processed ProductsScheffler (lab): Ground Meat Patties (lab) Meat Quality (lab)Scheffler (lab): Bratwurst, Sausage, and Enhanced ProductsCressman (lab): Egg White Foaming Egg White Functionality EmulsificationCressman (lecture): Slaughter, Inspection & GradingScheffler (lab) Meat Quality | |

*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.