ANSC 319 – Principles of Meat Science Spring 2023

Class meets MW: 1:00 – 2:15 in KH 307 Lab meets T: 1:00 – 2:50 in KH 307

Dr. Mark Hoge 314 Knoblauch Hall Cell: 309-255-2735

E-Mail: MD-Hoge@wiu.edu

Office Hours:

Monday and Wednesday: 9:00am-10:00am Thursday: 10:00am-12:00pm Livestock Center

Arranged by text: <u>309-255-2735</u>

Text Books:

Principles of Meat Science. Aberle, Forrest, Gerrard, and Mills. Kendall/Hunt

Publishing. ISBN: 0-7872-4720-0.

Principles of Animal Growth and Development. Gerrard and Grant. Kendall/Hunt

Publishing. ISBN: 0-7575-2986-0.

Course Objectives:

Cover animal protein from conception to consumption. Develop an understanding of growth and development, conversion of muscle to meat, and the evaluation of fresh meat that contributes to the overall eating experience.

		Date	Topic
Week 1 M		1/16	no class - holiday
	T	1/17	Introduction to Meat Science - Website Resources
	W	1/18	Meats Industry overview
Week 2	M	1/23	Skeletal Nomenclature
	T	1/24	Skeletal Nomenclature
	W	1/25	Structure and Composition of Animal Tissues
Week 3	M	1/30	Structure and Composition of Animal Tissues
	T	1/31	Muscle ID – Ham and Round
	W	2/1	Mechanism of Muscle Contraction
Week 4	M 2/6 Growth and Composition		Growth and Composition
	T	2/7	Muscle ID – Pork Loin / Beef Loin
	W	2/8	Growth and Composition
Week	M 2/13 Exam 1		Exam 1
	T	2/14	No Class – Lincoln's B Day

	W	2/15	Muscle Contraction	
Week 6	M	2/20	Muscle Contraction	
	T	2/21	Beef Loin - Forquarter	
	W	2/22	Muscle Contraction	
Week 7	M	2/27	Conversion of Muscle to Meat	
	T	2/28	Quality Variation – Retail ID	
	W	3/1	Properties of Fresh Meat	
Week 8	M	3/6	Excel Video with quiz	
	T	3/7	HYVEE Tour	
	W	3/8	Excel Video	
	SPRING BREAK		March 13-17	
Week 9	M	3/20	Principles of meat processing	
	T	3/21	Preservation and Storage of Meat	
	W	3/22	Storage and Preservation of Meat	
Week 10	M	3/27	Storage and Preservation of Meat	
	T	3/28	Lab -	
	W	3/29	Sausages, Meat Curing and Smoking	
Week 11	M	4/3	Federal Grading and its Interpretations	
	T	4/4	Live Animal Evaluation	
	W	4/5	Federal Grading and its Interpretations	
Week 12	M	4/10	Meats Judging	
	T	4/11	Galesburg Locker Tour	
	W	4/12	Meats Judging	
Week 13	M	4/17	Meat Merchandising	
	T	4/18	HyVee – Merchandising Lab	
	W	4/19	Preparing and Serving Meat	
Week 14	M	4/24	Preparing and Serving Meat	
	T	4/25	Taste Panel Lab	
	W	4/26	Food Safety and Microbiology - HACCP	
Week 15	M	5/1	Review for lab final - Food Safety - HACCP	
	T	5/2	LAB FINAL	
	W	5/3	Overview of Current Issues	
Week 16		5/8-5/12	FINALS WEEK	
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MEATS FINAL WEDNESDAY 1:00PM

Attendance: ATTENDANCE IS A MUST!!!!! Attendance will be taken and expressed as a test score equating to the percentage of classes attended. Students must be prepared to interact, and discuss topics relating to course assignments. Absenteeism will impede your success on assessments and course assignments. The course is centered around classroom assignments, activities, and classroom lecture.

ADA Compliance: In accordance with University policy and the Americans with Disabilities Act (ADA), accommodations in the area of test and note-taking may be made

for any student who notifies the instructor of the need for accommodation. It is imperative that you take the initiative to bring such needs to my attention, as I am legally not permitted to inquire about the particular needs of students. Furthermore, I would like also to request that students who may require special assistance in emergency evacuations contact me as to the most appropriate procedures to follow in such an emergency.

Academic Dishonesty: Any violation of the Academic Dishonesty Policy in Student Handbook will result in an automatic failure in the course. Plagiarism and cheating are areas of concern for the course. This course is designated to enhance your writing and presentation skills within your academic area, not the ability to copy thoughts and ideas.

Attention Education Majors:

The changes within the state certification requirements, you are required to receive a grade of a "C-" or better in this course in order to meet these new requirements. With the new university +/- grading system, receiving a "D+" or below will require you to retake this course or find a substitute course to meet School of Agriculture graduation requirements.

Excuses:

Any excuse for a missed test or assignment must be cleared **before** the assignment is due or test is to be taken. In general, the only accepted excuses will be for university events, personal health if a doctor's excuse is available, and verifiable family emergencies.

Tours:

Bushnell Locker in Bushnell, IL
Farmhouse Meat Company, Carthage, IL
JBS plant in Beardstown, IL
Tyson plant in Joslin, IL / Weber Beef
Farmland plant in Monmouth, IL
Thrushwood Meats in Galesburg, IL
Hy-Vee Meats Department in Macomb, IL

Grading Scale:	A = 92 - 100%	A = 90 - 91%	
	B+ = 87 - 89%	B = 82 - 86%	B - = 80 - 81%
	C+ = 77 - 79%	C = 72 - 76%	C - = 70 - 71%
	D+ = 67 - 69% F	D = 62 - 66%	D = 60 - 61%
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Homework and Quizzes:

<u>Late assignments will have 5 points taken off each day the assignment is</u> <u>late.</u> Quizzes will be 10 points each and will be announced at least one class period prior to the quiz.

Exams:

Exams will be a combination of fill in the blank, multiple choice, and short answer. They will reflect the notes and information covered in class or relevant information currently in popular press. If the final exam or one of the four hourly exams is missed without prior notice, a detailed oral exam will be administered by yours truly.

PLEASE REMEMBER:

INFORMATION ON SYLLABUS IS SUBJECT TO CHANGE!!!!!