

# **SYLLABUS**

Course title and number ANSC 307 Meats

Term Spring 2016

Meeting times and location M W 8 to 8:50 AM, MSTC 100

Labs, various times throughout the week

### **Course Description and Prerequisites**

Integrated studies of the meat animal processing sequence regarding the production of meat-type animals and the science and technology of their conversion to human food.

### **Objectives**

- 1. To impart knowledge relating the live animal to its ultimate value as a food product.
- 2. To relate breeding, feeding, selection and management to changes in the ultimate composition of meat animal products.
- 3. To develop technological and manipulative skills in the slaughter and cutting of meat animals and the processing of meat products.
- 4. To introduce anatomy, muscle structure and function, chemical composition and physical characteristics of carcasses and cuts as determinants of live animal and meat quality.
- 5. To teach the skills of carcass identification and grading to facilitate descriptions and definitions of quality and cutability in meat animal products.

### **Student Learning Objectives**

- 1. The student will understand the complexities involved in the conversion of live animals into food and by-products.
- 2. The student will be able to determine yield and quality grades of beef, pork, and lamb.
- 3. The student will know the basic anatomy and wholesale cuts of each species.
- 4. The student will understand the broad factors affecting meat tenderness, meat color, meat processing, and diet/health.

### **Instructor Information**

Name Jeffrey W. Savell

Telephone number Office: 979-845-3992; Home: 979-693-8906; Mobile: 979-255-6676

Email address j-savell@tamu.edu

Office hours Variable

Office location Room 348 KLBG

#### **Substitute Lecture and Lab Coordinator**

Name Ray R. Riley

Telephone number Office: 979-845-5651; Mobile: 979-255-0730

Email address r-rilev@tamu.edu

Office hours Variable

Office location Room 101A MSTC (Rosenthal Center)

**Lecture Assistant** 

NameCourtney BoykinTelephone number(512) 940-8795

Email address courtneyaboykin@tamu.edu

Office hours Variable

Office location Room 322 KLBG

**Lab Instructors** 

Monday	Tuesday	Wednesday	Thursday	Friday
•	ANSC 307 501	•	ANSC 307 505	ANSC 307H 203
	FSTC 307 501		8:00 to 10:50 AM	ANSC 307 506
	8:00 to 10:50 AM			FSTC 307 509
				8:00 to 10:50 AM
	Ray Riley		Clay Eastwood	McKensie Harris
	Room 101A		Room 322	Room 322 Kleberg
	Rosenthal Center		Kleberg Center	Center
	Clay Eastwood		Mark Frenzel	Hillary Henderson
	Room 322 Kleberg		Room 101	Room 322 Kleberg
	Center		Rosenthal Center	Center
ANSC 307H 201	ANSC 307H 200	ANSC 307 503	ANSC 307 507	ANSC 307 508
ANSC 307 502	ANSC 307 504	FSTC 307 503	FSTC 307 507	FSTC 307 511
12:40 to 3:30 PM				
Mark Frenzel	Drew Cassens	Courtney Boykin	Hillary	Aeriel Belk
Room 101	Room 101	Room 322 Kleberg	Henderson	Room 322
Rosenthal Center	Rosenthal Center	Center	Room 322	Kleberg Center
			Kleberg Center	
Adam Murray	Courtney Boykin	Drew Cassens		Courtney Boykin
Room 322 Kleberg	Room 322 Kleberg	Room 101	McKensie	Room 322 Kleberg
Center	Center	Rosenthal Center	Harris	Center
			Room 322	
			Kleberg Center	
			Adam Murray	
			Room 322	
			Kleberg Center	

# **Additional Email Addresses**

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Name	Email	
Belk, Aeriel	aeriel.belk@tamu.edu	
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Frenzel, Mark	markfrenzel@tamu.edu	
Harris, McKensie	mharris34@tamu.edu	
Henderson, Hillary	hend4790@tamu.edu	
Murray, Adam	amurr93@tamu.edu	

### **Attendance Policy**

Attendance for Major Examinations is MANDATORY. There will be NO makeup examinations. For students with an authorized excuse, the grade for a missed Major Examination will be determined by averaging the scores for the Major Examinations that were taken. The only absences that will be authorized are those found at http://student-rules.tamu.edu at the section

#### 7. Attendance:

- 7.1.1 Participation in an activity appearing on the university authorized activity list. (see List of Authorized and Sponsored Activities)
- 7.1.2 Death or major illness in a student's immediate family. Immediate family may include: mother, father, sister, brother, grandparents, spouse, child, spouse's parents, spouse's grandparents, stepmother, step-father, step-sister, step-brother, step-grandparents, grandchild, step-grandchild, legal guardian, and others as deemed appropriate by faculty member or student's academic dean.
- 7.1.3 Illness of a dependent family member.
- 7.1.4 Participation in legal proceedings or administrative procedures that require a student's presence.
- 7.1.5 Religious holy day. (See Appendix IV.)
- 7.1.6 Illness that is too severe or contagious for the student to attend class (to be determined by Health Center or off-campus physician).
- 7.1.7 Required participation in military duties.
- 7.1.8 Mandatory admission interviews for professional or graduate school which cannot be rescheduled. Any major examination missed for any other reason will not be excused and a grade of zero will be assigned for that examination.

### **Optional Final for Those With No Unauthorized Absences**

In order to encourage attendance, the final examination will be optional for those students who do not have unauthorized absences in lecture and in laboratory (for laboratory attendance, the student must attend the laboratory they are assigned to). Students who are tardy three times will be considered absent. Students exempt from the final will be allowed to take the final to improve their grade if necessary.

### **Opportunity to Improve Grade in Future Semesters**

Beginning Fall 2006, students who have no more than four unauthorized absences will be allowed to retake exams in subsequent semesters to attempt to improve their grades. Students who are eligible for this option must take the exams during the class time and date they are offered. The new exam grade will be inserted into the grade book for the student, and if the new

average improves the grade to the next grade level, a grade change form with the new grade will be completed and turned into the registrar's office.

### **Textbook and/or Resource Materials**

Lecture notes are available from Copy Corner, 2307 Texas Avenue South, Suite B, College Station, Phone: 979-694-COPY.

### **Lecture Outline**

Monday	Topic	Wednesday	Topic
January 18	Martin Luther King holiday, no class	January 20	Introduction/Meat Inspection
January 25	Meat Inspection	January 27	Food Safety and Meat
February 1	Slaughter-Dressing of Livestock	February 3	Slaughter-Dressing of Livestock
February 8	Kosher and Halal	February 10	Producer-Related Problems
February 15	Packer-Related Problems	February 17	Exam A
February 22	Livestock By-Products	February 24	Carcass Components, Muscle Structure
February 29	Meat Tenderness	March 2	Meat Tenderization
March 7	Meat Color	March 9	Packaging Systems for Meat
March 21	Meat Curing, Bacon & Ham Processing	March 23	Sausage Manufacturing
March 28	Sausage Manufacturing	March 30	Exam B
April 4	Appraisal of Market Animals	April 6	Appraisal of Market Animals
April 11	USDA Slaughter Animal/Carcass Grades	April 13	Growth/Development of Meat Animals
April 18	Objective Evaluations of Meat Animals	April 20	Contribution of Meat to the Diet
April 25	Contribution of Meat to the Diet	April 27	Exam C
May 2	Exams handed back; exemptions to the finals given		

# **Exams**

Three major examinations covering both lecture and laboratory material will be given during lecture on the following dates:

Exam	Date
Exam A	Wednesday, February 17
Exam B	Wednesday, March 30
Exam C	Wednesday, April 27
Final exam	Thursday, May 5, 10 AM

# Grading

Grades will be computed on the basis of 750 total points (600 for exempt students).

Item	Points
Exam A	150
Exam B	150
Exam C	150
Laboratory	150
Final exam	150
Total	750

# **Laboratory Schedule**

Lab	Subject	Week of	Knives required
1	Orientation and Meat Inspection	January 18	No
2	Anatomy	January 25	No
3	Pork Slaughter-Dressing	February 1	Yes
4	Pork Evaluation	February 8	No
5	Pork Fabrication	February 15	Yes
6	Ham Manufacturing	February 22	No
7	Lamb Slaughter-Dressing	February 29	Yes
8	Lamb Evaluation and Fabrication	March 7	Yes
9	Spring Break	March 14	
10	Sausage Manufacturing I	March 21	No
11	Beef Slaughter-Dressing	March 28	Yes
12	Beef Evaluation	April 4	No
13	Beef Fabrication I	April 11	Yes
14	Beef Fabrication II	April 18	Yes
15	Sausage Manufacturing II	April 25	No

### Laboratory Policy, Grading, and Materials

#### Attendance

Policies regarding authorized absences are the same as those set forth in lecture.

### Grading

The laboratory will make up 150 points of the 750 total possible points in this course. The 150 total possible points will be broken down as follows:

Item	Points
Lab exercises	100
Attendance	25
Participation	25
Total	150

#### Lab Exercises

Thirteen laboratory exercises (100 points total) will be assigned during the semester. After each lab, there will be an exercise assigned which is due the following lab. Failure to turn in homework when specified will result in the following point deductions: (1) same day, but after lab = -1; (2) 1 day late = -2; (3) 2 days late = -3; and (4) 3 days late = no credit.

### **Participation**

A relative value assigned by your instructor based upon your performance in lab. Interest, preparedness for lab (including having knives), and participation with your group (both during lab and cleanup) will be evaluated. Lab instructors may give pop quizzes to help determine this grade. Five (5) points will be subtracted from this value for each unauthorized absence.

#### Attendance

Five (5) points will be subtracted from this value for each unauthorized absence.

### **Laboratory Manual**

Savell, J.W. and G.C. Smith. 2009. "Meat Science Laboratory Manual (8th ed.)," American Press, Boston, Massachussetts.

### **Equipment**

Orders will be taken during the first week of class for the knife sets that will be used in lab. This is what is needed: scabbard and chain; boning knife, 5"; lamb skinning knife; steel, smooth 10".

Lockers will be available for clothing in the Rosenthal Center during the laboratory period only. (These lockers will not be issued for the full semester.) Rubber footwear must be worn during all laboratory periods, which involve participation on the slaughter floor, in the cutting room or in the cooler.

The Rosenthal Center will provide safety helmets, rubber aprons, boning aprons, coveralls, frocks, rubber footwear, cutting gloves, arm guards, and white aprons, which are located in the laundry and uniform storage room. Because equipment will be used by other students in the other lab periods, you will be responsible for cleaning it and placing it back in the room for the subsequent laboratory periods.

### **Americans with Disabilities Act (ADA)**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit <a href="http://disability.tamu.edu">http://disability.tamu.edu</a>.

### **Academic Integrity**

For additional information please visit: <a href="http://www.tamu.edu/aggiehonor">http://www.tamu.edu/aggiehonor</a> "An Aggie does not lie, cheat, or steal, or tolerate those who do."