

<b>Course title and number</b>	<b>ANSC 307 Meats</b>
Term	Fall 2015
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

<b>Name</b>	<b>Jeffrey W. Savell</b>
Telephone number	Office: 979-845-3992; Home: 979-693-8906; Mobile: 979-255-6676
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Office hours	Variable
Office location	Room 348 KLBG

### Substitute Lecture and Lab Coordinator

<b>Name</b>	<b>Ray R. Riley</b>
Telephone number	Office: 979-845-5651; Mobile: 979-255-0730
Email address	r-riley@tamu.edu
Office hours	Variable
Office location	Room 101A MSTC (Rosenthal Center)

**Lecture Assistant**

**Name** Courtney Boykin  
**Telephone number** (512) 940-8795  
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**Office hours** Variable  
**Office location** Room 322 KLBG

**Lab Instructors**

<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
	Sections 503 8:00 to 10:50 AM		Sections 509 8:00 to 10:50 AM	Sections 513 8:00 to 10:50 AM
	<b>Mark Frenzel</b> Room 101C Rosenthal Center  <b>Aerial Belk</b> Room 322 Kleberg Center		<b>Hillary Henderson</b> Room 322 Kleberg Center  <b>McKensie Harris</b> Room 322 Kleberg Center	<b>Andrew Cassens</b> Room 101B Rosenthal Center  <b>Clay Eastwood</b> Room 322 Kleberg Center
Section 501 12:40 to 3:30 PM	Sections 505 12:40 to 3:30 PM	Sections 504 & 507 12:40 to 3:30 PM	Sections 506 & 511 12:40 to 3:30 PM	Sections 515 12:40 to 3:30 PM
<b>Ray Riley</b> Room 101A Rosenthal Center  <b>Aerial Belk</b> <b>McKensie Harris</b> Room 322 Kleberg Center	<b>Lindsey Mehall</b> Room 322 Kleberg Center  <b>Crystal Waters</b> Room 324 Kleberg Center	<b>Clay Eastwood</b> Room 322 Kleberg Center  <b>Hillary Henderson</b> Room 322 Kleberg Center	<b>Crystal Waters</b> Room 324 Kleberg Center  <b>Lindsey Mehall</b> Room 322 Kleberg Center	<b>Courtney Boykin</b> Room 322 Kleberg Center  <b>Andrew Cassens</b> Room 101B Rosenthal Center

**Additional Email Addresses**

Andrew Cassens	drew.cassens15@tamu.edu
Aerial Belk	aerial.belk@tamu.edu
Clay Eastwood	leastwood@tamu.edu
Mark Frenzel	markfrenzel@tamu.edu
McKensie Harris	mharris34@tamu.edu
Hillary Henderson	hend4790@tamu.edu
Lindsey Mehall	lnmehall@tamu.edu
Crystal Waters	cwaters3@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 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

<b>Monday</b>	<b>Topic</b>	<b>Wednesday</b>	<b>Topic</b>
August 31	Introduction	September 2	Meat Inspection
September 7	Meat Inspection	September 9	Food Safety and Meat
September 14	Slaughter-Dressing of Livestock	September 16	Slaughter-Dressing of Livestock
September 21	Kosher and Halal	September 23	Producer-Related Problems
September 28	Packer-Related Problems	September 30	<b>Exam A</b>
October 5	Livestock By-Products	October 7	Carcass Components, Muscle Structure
October 12	Meat Tenderness	October 14	Meat Tenderization
October 19	Meat Color	October 21	Packaging Systems for Meat
October 26	Meat Curing, Bacon & Ham Processing	October 28	Sausage Manufacturing
November 2	Sausage Manufacturing	November 4	<b>Exam B</b>
November 9	Appraisal of Market Animals	November 11	Appraisal of Market Animals
November 16	USDA Slaughter Animal/Carcass Grades	November 18	Growth/Development of Meat Animals
November 23	Objective Evaluations of Meat Animals	November 25	Reading Day
November 30	Contribution of Meat to the Diet	December 2	<b>Exam C</b>

### Exams

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

<b>Exam</b>	<b>Date</b>
Exam A	Wednesday, September 30
Exam B	Wednesday, November 4
Exam C	Wednesday, December 2
Final exam	Friday, December 11, 10 AM

## Grading

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

<b>Item</b>	<b>Points</b>
Exam A	150
Exam B	150
Exam C	150
Laboratory	150
Final exam	150
<b>Total</b>	<b>750</b>

## Laboratory Schedule

<b>Lab</b>	<b>Subject</b>	<b>Week of</b>	<b>Knives required</b>
1	Orientation and Meat Inspection	August 31	No
2	Anatomy	September 7	No
3	Pork Slaughter-Dressing	September 14	Yes
4	Pork Evaluation	September 21	No
5	Pork Fabrication	September 28	Yes
6	Ham Manufacturing	October 5	No
7	Lamb Slaughter-Dressing	October 12	Yes
8	Lamb Evaluation and Fabrication	October 19	Yes
9	Beef Slaughter-Dressing	October 26	Yes
10	Beef Evaluation	November 2	No
11	Beef Fabrication I	November 9	Yes
12	Beef Fabrication II	November 16	Yes
13	Thanksgiving Week – No Labs	November 23	--
14	Sausage Manufacturing	November 30	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:

<b>Item</b>	<b>Points</b>
Lab exercises	100
Attendance	25
Participation	25
<b>Total</b>	<b>150</b>

### **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, Massachusetts.

### **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"; steak cutting knife, 8"; 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, in Cain Hall, Room B118, or call 845-1637. For additional information visit <http://disability.tamu.edu>

### **Academic Integrity**

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