

ANIMAL SCIENCES 3634C (MEATS)
SYLLABUS
FALL 2015

Text: Meat We Eat (optional). Romans and others. Fourteenth Edition.

Lab Manual: Laboratory manual for Meat Science (required). Smith, Savell. Eighth Edition.

Instructor: D. Dwain Johnson, 224C Animal Sciences, 392-1922

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Office hours: 8:30 -11:30 am Tuesday and Thursday

Classroom location: Room 156 Animal Sciences Building

Lecture: Period 1

Laboratory: Periods 6 and 7; Periods 8 and 9, room 156.

Teaching assistants: Amy Bass - bassgrl@ufl.edu, 249 Animal Sciences

Objectives of the course:

1. To impart knowledge relating to 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 relate research results regarding animal production to actual changes in the dollar value of its product.
5. To gain insight into the efficient marketing of animals and their products.
6. To introduce anatomy, muscle structure and function, chemical composition and physical characteristics of carcasses and cuts as determinants of live animal and meat quality.
7. To teach the skills of carcass, wholesale, and retail cut identification to facilitate trading meat products in domestic and export markets.

**Academic Honesty, Software Use, UF Counseling Services,
Services for Students with Disabilities**

In 1995 the UF student body enacted a new honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students. In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by

honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor Pledge: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

On all work submitted for credit by students at the university, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

The university required all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage of honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior. Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean, or Student Honor Court.

(Source: 2015-2016 Undergraduate Catalog)

It is assumed all work will be completed independently unless the assignment is defined as a group project, in writing by the instructor. This policy will be vigorously upheld at all times in this course.

Software Use:

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Campus Helping Resources:

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. Both the Counseling Center and Student Mental Health Services provide confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance. The Counseling Center is located at 301 Peabody Hall (next to Criser Hall). Student Mental Health services is located on the second floor of the Student Health Care Center in the Infirmary.

- University Counseling Center, 3190 Radio Rd, 392-1575, www.counsel.ufl.edu
- Career Resource Center, CR-100 JWRU, 392-1601 ext: 0, www.crc.ufl.edu
- Student Mental Health Services, Rm. 245 Student health Care Center, 392-1161,
- Alcohol and Substance Abuse Program (ASAP)
- Attention Deficit Hyperactivity Disorder (ADHD)
- Center for Sexual Assault / Abuse Recovery & Education (CARE)
- Eating Disorders Program
- Employee Assistance Program
- Suicide Prevention Program

Students with Disabilities:

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. 0001 Reid Hall, 392-8565, www.dso.ufl.edu/drc

Examinations and Grading:

Exam A – October 1

Exam B – November 3

Final Exam – 15F = December 15 – (8:00 – 10:00 pm)

Laboratory quizzes – 3 quizzes of about 20 minutes duration consisting of both a written part and items for identification will be given.			Grading – Grades will be computed on the basis of 525 total points in the course, broken down as follows:	
DATE	LABS COVERED	POINTS		POINTS
September 24	1, 2, 3	30	Lecture Exams	200
October 8 (during lecture)	4, 5, 6	30	Laboratory	175
November 5	7, 8, 9, 10	40	Final Exam	150
December 3	Audit Report given	50		
Lab Participation		25		
TOTAL		175	TOTAL	525

This course will adhere to UF grading policies as delineated in the following document:
<http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

Grades will be assigned on the basis of percentage of total possible points:

A = 90-100 %

B = 80- 89

C = 70-79

D = 60-69

E = < 60

Plus (+) and minus (–) grades may be used as deemed appropriate by the instructor.

Attendance:

- Attendance is mandatory for all quizzes, exams and laboratories. Excused absences, which allow course points to be made up or adjusted, include the following:
- Absence for a University-approved field trip or activity (notice must be given one week in advance).
- Absence for a death or serious illness in the immediate family.
- Absence resulting from personal illness (verification consisting of a letter of explanation from hospital or doctor on official letterhead).

**ANS 3634C
LECTURE SCHEDULE
Fall 2015**

Date		Lecture
August	25	Course introduction
	27	History and purpose of meat inspection
September	1	Meat inspection procedures and programs
	3	Meat inspection procedures and programs
	8	Meat inspection and food safety
	10	Producer and packer related problems
	15	Conversion of muscle to meat
	17	Stress and its relationship to muscle properties
	22	Muscle structure and function
	24	Muscle contraction
	29	Tough versus tender muscles
October	1	EXAM A
	6	Postmortem tenderization: Part A
	8	QUIZ B
	13	Postmortem tenderization: Part B
	15	Cartilage and bone growth
	20	Fat deposition and growth
	22	Muscle growth
	27	Growth related to producing a desirable carcass
	29	Factors affecting meat animal composition: Part A
November	3	EXAM B
	5	Factors affecting meat animal composition: Part B
	10	Factors affecting meat animal composition: Part C
	12	Technological advances in harvesting meat animals
	17	Meat animal by-products
	19	Meat color development
	24	Meat color continued
December	1	Meat curing and smoking
	3	Meat curing and smoking, continued
	8	Course wrap-up
	15	FINAL EXAM (15F) 8:00 – 10:00 pm

**ANS 3634C
LAB SCHEDULE
Fall 2015**

No.	Subject	Date		Laboratory Exercise ^a	Required Dress ^b
1	Meat Inspection	August	27	1 & 2	A
2	Anatomy	September	3	3	A
3	Pork Slaughter – SOP 2		10	4	B
4	Pork Wholesale fabrication – SOP 2		17	6	B
5	Pork Retail Fabrication – SOP 5		24	6	B
6	Lamb Slaughter – SOP 3	October	1	9	B
7	Lamb Fabrication – SOP 5		8	11	B
8	Beef Slaughter – SOP 1		15	12	B
9	Beef Forequarter Fabrication – SOP 5		22	14	B
10	Beef Hindquarter Fabrication – SOP 5		29	14	B
11	Retail Audit Assignment	November	5	14	A
12	Quality Control and Sausage Formulation – SOP 7		12	8 & 15	B
13	Sausage Manufacture – SOP 9		19	15 & 8	B
14	Audit Reporting	December	3		A

^aLaboratory Manual for Meat Sciences, (Smith, Savell, 8th Ed.)

^bA =No special requirement, B = Rubber footwear, old jeans, old shirt.

**ANS 3634C
LABORATORY
Fall 2015**

Laboratory Manual:

A Laboratory Manual for Meat Science by Smith, Savell. Eighth Edition.

Equipment:

1 scabbard, sanitizable	1 knife, boner 6"	1 short-sleeved shirt
1 pair rubber footwear	1 pair of pants (old jeans are fine)	

Lockers will be available for clothing in the Meat Lab during the laboratory period. Pants and shirt must be washed after each use to maintain proper cleanliness. Rubber footwear must be worn during all laboratory periods that involve participation on the slaughter floor, in the cutting room, or in the cooler.

The Meat Laboratory will provide safety helmets, rubber aprons, and safety gloves. Since this equipment will be used by students in the other lab periods, you will be responsible for cleaning it and placing it back in the proper location for subsequent laboratory periods.