ANSC 319 – Principles of Meat Science  
Spring 2013  
Class meets MWF: 10:00 – 10:50 in KH 307  
Lab meets T: 10:00 – 11:50 in KH 307

Dr. Mark Hoge  
314 Knoblauch Hall  
Office: 298-2537  
Cell: 309-255-2735  
E-Mail: MD-Hoge@wiu.edu

Office Hours:  
Monday and Wednesday: 11:00am-12:00pm  
Friday: 8:30-10:00am

Course Objectives:  
Establish the fundamentals of livestock production such as genetics, nutrition, health, meats, and reproduction. Provide an understanding on the interaction between society and animal protein production in the United States. Allow students to become familiar with the WIU farms and gain hands-on experience in handling and managing livestock.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td></td>
</tr>
<tr>
<td>M 1/14</td>
<td>Introduction to Meat Science</td>
</tr>
<tr>
<td>T 1/15</td>
<td>Lab – Website Resources</td>
</tr>
<tr>
<td>W 1/16</td>
<td>Overview of the Meats Industry</td>
</tr>
<tr>
<td>F 1/18</td>
<td>Structure and Composition of Animal Tissues</td>
</tr>
<tr>
<td>Week 2</td>
<td></td>
</tr>
<tr>
<td>M 1/21</td>
<td>Structure and Composition of Animal Tissues</td>
</tr>
<tr>
<td>T 1/22</td>
<td>Skeletal Nomenclature</td>
</tr>
<tr>
<td>W 1/23</td>
<td>Structure and Composition of Animal Tissues</td>
</tr>
<tr>
<td>F 1/25</td>
<td>Quiz 1 – Skeletal Nomenclature</td>
</tr>
<tr>
<td>Week 3</td>
<td></td>
</tr>
<tr>
<td>M 1/28</td>
<td>Structure and Composition of Animal Tissues</td>
</tr>
<tr>
<td>T 1/29</td>
<td>Muscle ID – Ham and Round</td>
</tr>
<tr>
<td>W 1/30</td>
<td>Mechanism of Muscle Contraction</td>
</tr>
<tr>
<td>F 2/1</td>
<td>Quiz 2 – Growth and Composition</td>
</tr>
<tr>
<td>Week 4</td>
<td></td>
</tr>
<tr>
<td>M 2/4</td>
<td>Growth and Composition</td>
</tr>
<tr>
<td>T 2/5</td>
<td>Muscle ID – Pork Loin / Beef Loin</td>
</tr>
<tr>
<td>W 2/6</td>
<td>Growth and Composition</td>
</tr>
<tr>
<td>F 2/8</td>
<td>Quiz 3 – Growth and Composition</td>
</tr>
<tr>
<td>Week 5</td>
<td></td>
</tr>
<tr>
<td>M 2/11</td>
<td>Harvest Process</td>
</tr>
<tr>
<td>T 2/12</td>
<td>Bushnell Locker Tour</td>
</tr>
<tr>
<td>W 2/13</td>
<td>Harvest Process</td>
</tr>
<tr>
<td>F 2/15</td>
<td>Exam I Harvest Process</td>
</tr>
<tr>
<td>Week 6</td>
<td></td>
</tr>
<tr>
<td>M 2/18</td>
<td>Muscle Contraction</td>
</tr>
<tr>
<td>T 2/19</td>
<td>Beef Loin - Forquarter</td>
</tr>
</tbody>
</table>
W 2/20  Muscle Contraction
F 2/22  Quiz 4
Week 7  M 2/25  Conversion of Muscle to Meat
T 2/26  Quality Variation – Retail ID
W 2/27  Properties of Fresh Meat
F 3/1  Quiz 5
Week 8  M 3/4  Excel Video with quiz
T 3/5  HYVEE Tour
W 3/6  Excel Video with quiz
F 3/8  Principles of meat processing
SPRING BREAK  March 11-15
Week 9  M 3/18  Principles of meat processing
T 3/19  Preservation and Storage of Meat
W 3/20  Storage and Preservation of Meat
F 3/22  Quiz 6-
Week 10  M 3/25  Storage and Preservation of Meat
T 3/26  Lab -
W 3/27  Sausages, Meat Curing and Smoking
F 3/29  Exam II-
Week 11  M 4/1  Federal Grading and its Interpretations
T 4/2  Live Animal Evaluation
W 4/3  Federal Grading and its Interpretations
F 4/5  Quiz 7 -
Week 12  M 4/8  Meats Judging
T 4/9  Thrushwood Locker Tour
W 4/10  Meats Judging
F 4/12  Quiz 8 -
Week 13  M 4/15  Meat Merchandising
T 4/16  HyVee – Merchandising Lab
W 4/17  Preparing and Serving Meat
F 4/19  Quiz 9-
Week 14  M 4/22  Preparing and Serving Meat
T 4/23  Taste Panel Lab
W 4/24  Food Safety and Microbiology - HACCP
F 4/26  Exam III
Week 15  M 4/29  Review for lab final - Food Safety - HACCP
T 4/30  LAB FINAL
W 5/1  Overview of Current Issues
F 5/3  Review for Final
Week 16  5/6-5/10  FINALS WEEK

MEATS FINAL MONDAY 10:00AM

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, which go into effect immediately for all of those students who graduate in the spring 2012 and after, 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 "C-" 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:**

- **Hy-Vee Meats Department in Macomb, IL**
- **Bushnell Locker in Bushnell, IL**
- **Excel plant in Beardstown, IL**
- **Tyson plant in Joslin, IL / Weber Beef**
- **Farmland plant in Monmouth, IL**
- **Thrushwood Meats in Galesburg, IL**
Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Grade</th>
<th>Range</th>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>92 – 100%</td>
<td>A-</td>
<td>90 – 91%</td>
<td>B+</td>
<td>87 – 89%</td>
</tr>
<tr>
<td>B</td>
<td>82 – 86%</td>
<td>B</td>
<td>80 – 81%</td>
<td>B-</td>
<td>80 – 81%</td>
</tr>
<tr>
<td>C</td>
<td>72 – 76%</td>
<td>C+</td>
<td>77 – 79%</td>
<td>C</td>
<td>70 – 71%</td>
</tr>
<tr>
<td>C-</td>
<td>70 – 71%</td>
<td>D+</td>
<td>67 – 69%</td>
<td>D</td>
<td>62 – 66%</td>
</tr>
<tr>
<td>D-</td>
<td>60 – 61%</td>
<td>F</td>
<td>≤ 59%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WEEK | QUIZ POINTS | EXAM POINTS | YOUR POINTS
---|-------------|-------------|-------------
2   | 20          |             |             
3   | 20          |             |             
4   | 20          |             |             
5   | --          | 150         |             
6   | 20          |             |             
7   | 20          |             |             
8   | --          |             |             
9   | 20          |             |             
10  | --          | 150         |             
11  | 20          |             |             
12  | 20          |             |             
13  | 20          |             |             
14  | --          | 150         |             
15  | --          | 200 Lab Final |       
Final | --         | Cook Lab Final |       
TOTAL | 160 (drop 1 quiz) | 650 | ( ) / 810 =

Homework and Quizzes:

*Late assignments will have 5 points taken off each day the assignment is late.* 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!!!!!!