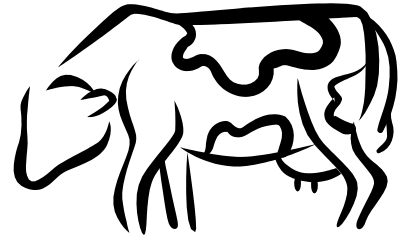


**ANFS 404
Dairy Production
Spring 2015**

Lecture: Tuesday and Thursday
9:30 to 10:45
112 McDowell Hall

Lecture Instructor: Dr. Tanya Gressley
032 Townsend Hall
302-831-1940
gressley@udel.edu



Office Hours: by appointment

Text: This course has no official text, though various supplemental readings will be posted on Canvas. These include Babcock Dairy Essentials technical guides available free of charge (<http://babcock.cals.wisc.edu/?q=node/120>).

Program Student Learning Objectives

This course addresses UD and ANFS learning objectives including:

1. Attain effective skills in oral and written communication of scientific ideas.
2. Use critical thinking, quantitative reasoning, skeptical inquiry and scientific approaches to solve problems.
3. Be able to work and learn both independently and collaboratively.
4. Develop the intellectual curiosity, confidence, and engagement that will lead to lifelong learning.
5. Develop the ability to integrate academic knowledge with experiences that extend beyond the boundaries of the classroom.

Course Student Learning Objectives

This course is designed to integrate and apply knowledge from the ANFS major coursework. Reflection, self-assessment, sharing of ideas, and critical analysis will be emphasized. The specific learning goals are:

1. Students will demonstrate, integrate and apply knowledge of the major core concepts of Animal and Food Sciences as they apply to the dairy industry.
2. Students will use critical thinking and reasoning, skeptical inquiry and the scientific approach to solve problems relevant to the dairy industry.
3. Students will demonstrate effective written and oral presentation skills important for communicating scientific ideas.
4. Students will demonstrate reflective thinking and will evaluate their contributions to their own learning and to the learning of their peers.
5. Students will demonstrate an understanding of different perspectives on ethics, values and the roles and use of animals in society. Students will be able to discuss contemporary ethical and moral issues associated with dairy production.

Course Description: ANSC 404 integrates principles of anatomy, nutrition, genetics, reproduction, housing, health, management, nutrient management and physiology as they relate to the dairy industry. This course is intended to tie together the core concepts of the Animal and Food Sciences Curriculum as they relate to dairy cattle production. Lecture periods will consist primarily of instructor presentations and group work to cover the course materials. Laboratory periods are designed to reinforce course content by development of “hands on” skills used in dairy production. This course also has out-of-class time commitments consisting of group or individual work to reinforce concepts learned in class using real-world examples.

Exams: There will be three exams including a final. The final will be given during the time designated by the University and will not be cumulative. Only under extenuating circumstances as described in the Faculty Handbook will make up exams be administered. You must schedule a make-up exam BEFORE the regular exam date (must have advanced notice and written excuse).

Attendance: Participation is essential to the success of this course. Excused absence policies are according to the Faculty Handbook. Unexcused absences from lab will result in a 0 on assignments associated with that lab. Attendance in lecture will be assessed randomly on 11 dates during the semester. Students present or with excused absences documented prior to the start of the lecture period will receive 20 points for attending at least 10 of the 11 times. After the first absence, 2 points will be deducted for subsequent absences (for example 3 total absences would result in 16 points out of 20 possible).

Lecture Materials: All lecture materials will be posted on Canvas. Students are responsible for printing lecture slides and bringing them class.

Groups and Group Member Evaluations: Group work is an extensive component of this course. “Real world” occupations including dairying require daily cooperation and communication to get the work done. Groups will create and adhere to a formal set of group guidelines. Group members will anonymously evaluate one another’s contribution to the group and that evaluation will be used in final grade calculations.

Factsheet Assignment: Groups will critically evaluate a current issue faced by dairy producers. Groups will develop a factsheet outlining how producers might deal with that issue. Full details are found on Canvas.

Labs: Labs are scheduled on Fridays beginning 2/13/15 and a lab syllabus will be distributed during the first lab. The labs will require “hands on” experience and thus you are required to participate and dress appropriately for manure and weather conditions. Safety must be of primary concern and students must sign and adhere to the “Rules for the ANFS 404 Lab”. Students should not be alone when working with animals. Some laboratory assignments will require commitments outside of lab time. Other afterhours work with animals requires permission from the instructor. Lab assignments including the Lab Portfolio pieces are as detailed in the lab syllabus and on Canvas.

Reflection Paper: A reflection paper is due on the last day of classes. This anonymous reflection gives students an opportunity to evaluate their learning over the semester.

Late Assignment Policy: Arrangements for assignments to be made up need to be made PRIOR to any absence. Failure to do this will result in a loss of points. No credit will be given for assignments associated with laboratory periods missed due to unexcused absences. Pre-labs and the Factsheet Individual Research Assignment will only be eligible for 50% of total points if turned in late. For other assignments, 10% reduction in total points possible will occur for every day or fraction of a day that an assignment is late. If a late assignment is turned into my mailbox in the main office (044 Townsend Hall), please ask a staff member to sign the top of the document and include the time and date. If a time signature is not there, then the assignment will be counted as turned in when I first see it.

Code of Conduct: Disruptive behavior will not be tolerated. Examples of disruptive conduct include talking in class, late arrival and texting. Students displaying disrupted behavior may be asked to leave the classroom.

Academic Honesty: Academic dishonesty of any form will not be tolerated. You are encouraged to become familiar with University's Policy on Academic Dishonesty found in the "Student Guide to University Policies". The content of the guide applies to this course.

Grading:

Exam 1	100
Exam 2	100
Exam 3 (Final)	100
Lecture attendance	20
Factsheet (4 assignments)	90
Lab portfolio (3 pieces)	80
Other lab assignments	90
Group member evaluation	25
Reflection paper	<u>20</u>
Total	625

A: >92%; **A-:** 90-91%; **B+:** 88-89%; **B:** 82-87%; **B-:** 80-81%; **C+:** 78-79%; **C:** 72-77%; **C-:** 70-71%; **D+:** 68-69%; **D:** 62-67%; **D-:** 60-61%; **F:** <60

Lecture Schedule

Date	Topic*	Items Due / Activity *
2/10/15	The dairy industry	
2/12/15	Cow basics	Student Info Assignment due on Canvas by 5 pm
2/17/15	Cow basics / activity	<i>Decide on factsheet topic choices</i>
2/19/15	Milking and mastitis	
2/24/15	Reproduction	
2/26/15	Reproduction	
3/3/15	Catch up / activity	Factsheet individual research assignment due in lecture <i>In-class review of topic research</i>
3/5/15	Raising dairy replacements	
3/10/15	Calf and cow health / activity	Lab Portfolio #1 due on Canvas <i>Factsheet building activity</i>
3/12/15	Cow health	
3/17/15	EXAM 1 (2/10 through 3/10)	
3/19/15	Facilities and behavior: Guest instructor Ms. Laura Nemec	
3/24/15	Facilities and behavior	Factsheet rough draft due on Canvas
3/26/15	Nutrition	
4/7/15	Nutrition: Guest instructor Dr. Limin Kung	Factsheet peer evaluations due on Canvas
4/9/15	Roles of the nutritionist: Guest instructor Mr. Ian Shivas	
4/14/15	Genetics and sire selection	
4/16/15	EXAM 2 (3/12 through 4/14)	
4/21/15	Honors/grad presentations on commercial dairies	
4/23/15	Genetics and sire selection	Lab Portfolio #2 due on Canvas
4/28/15	Energy balance	
4/30/15	Lameness	Factsheet final draft due on Canvas
5/5/15	To be determined	
5/7/15	To be determined	
5/12/15	To be determined	Lab Portfolio #3 due on Canvas
5/14/15	To be determined	Reflection paper due; group member evaluation due

Note: Topics and activities are tentative and will be adjusted regularly.