



COLLEGE OF
**Agricultural Sciences
and Natural Resources**
A&M-COMMERCE

**ANS 597 Advanced Dairying
Section 02W
COURSE SYLLABUS: SUMMER II 2022**

INSTRUCTOR INFORMATION

Instructor: Dr. Douglas Eborn

University Email Address (preferred): Douglas.Eborn@tamuc.edu

Office Location: 233D AGIT

Office Phone: 903-886-5676

Communication Response Time: 48 hours

COURSE INFORMATION

Materials:

All required material will be provided as handouts in PDF format including extension publications, popular press articles, and lecture notes created by me. Also, Dr. Jeffrey Stevenson, Professor of Animal Science at Kansas State University, has graciously provided me with and given permission to materials that he uses in a dairy science class taught at Kansas State University. I would like to thank him and those before him that put this material together.

This manual has been used by thousands of students at Kansas State University during the past 35 years. It contains numerous contributions by current and former faculty including Drs. Edward P. Call, J. Richard Dunham, Charles L. Norton, James L. Morrill, and John E. Shirley. As current instructor, I thank my predecessors for their contributions and trust that the reader will find enjoyment by learning more about the magic and wonder of the U.S. dairy cow and the dairy industry.

J. S. Stevenson

Textbook(s) Required

No textbook is required.

The following is the textbook I will use for this course and much of its outline and material. If you would like a recommended or supplemental textbook for this course I suggest the following:

The syllabus/schedule are subject to change.

Optional:

Dairy Cattle Science

Publisher: Prentice Hall; 4th edition (June 23, 2005)

ISBN-10: 0131134124

ISBN-13: 978-0131134126

Student Learning Outcomes

1. Describe the characteristics of the dairy industry including recognizing the major dairy breeds in the U.S, characteristics of dairy herds and practices, and marketing of dairy products.
2. Understand how dairy cattle are visually and functionally evaluated.
3. Describe how dairy herds are improved through genetic selection.
4. Understand components and characteristics of dairy feed and feeding of young calves, dry cows, and lactating dairy cows.
5. Understand current strategies and difficulties in breeding dairy cows.
6. Describe the anatomy of the udder, milk synthesis, milk letdown, and composition of milk.
7. ANS 597: Describe the challenges and advancements that currently exist in the dairy industry.
8. ANS 597: Review current research and its implications in the dairy industry.

Course Description

A review of dairy breeds and their selection, milk secretion, composition and handling, milking equipment and facilities with a more advanced emphasis in genetics, nutrition, and management.

The course will be broadly broken up into 5 sections. Under each section is 4-6 topics. Approximately 20-25 topics will be covered during the course.

- I. Dairy Industry Overview
 - a. Statistics and Numbers
 - b. Breeds
 - c. Characteristics of Cow Herd
 - d. Milk Marketing and Pricing
- II. Genetic Improvement and Selection
 - a. Type and Linear Evaluations
 - b. Herd Records
 - c. PTA's
 - d. Genomics
- III. Management and Nutrition
 - a. Overview of Nutrients and Feedstuffs
 - b. Pre-Weaned Calves
 - c. Replacement Heifers

The syllabus/schedule are subject to change.

- d. Dry and Transition Cows
 - e. Lactating Cows
- IV. Management - Other
- a. Facilities
 - b. Reproduction
 - c. Disease and Parasites
 - d. Calf Care
- V. Lactation
- a. Mammary Gland Anatomy
 - b. Lactogenesis
 - c. Milk-Let Down
 - d. Milking

Course Overview

This course is ~5 weeks in duration beginning July 11th and ending August 11th. This is a tentative schedule.

1. Week 1 (July 11th - July 17th)
 - i. 2 Discussion Posts
 - ii. Quiz #1
2. Week 2 (July 18th – July 24th)
 - i. 2 Discussion Posts
 - ii. 4 Responses to Week 1 Discussion Posts
 - iii. Exam 1
3. Week 3 (July 25th – July 31st)
 - i. 2 Discussion Posts
 - ii. 4 Responses to Week 2 Discussion Posts
 - iii. Quiz #2
4. Week 4 (August 1st – August 7th)
 - i. 2 Discussion Posts
 - ii. 4 Responses to Week 3 Discussion Posts
 - iii. Exam 2
5. Week 5 (August 8th – August 11th)
 - a. Wrap up and finalize course
 - b. Final Exam

For Each Week:

The syllabus/schedule are subject to change.

Each week will have the same format and contain the following heading or subheadings: **Due dates will always be Monday except for the last week which ends of Thursday August 11th!**

1. Lecture Material
 - a. Recorded Presentations
 - b. Lecture Notes
2. KSU handout
3. Current topic
4. 2 Discussion posts (due **Friday** night)
5. 4 Discussion post responses (due **Wednesday** night)
6. Question and Answer
7. Quiz (due **Monday** night)
8. Research Paper of the Week

Topic Assignments

A recorded lecture file will be available for each topic (5-7 topics/week) with a PDF of the lecture slide for you to take notes on!! More information will be given in the lectures.

KSU Handout

The assignment will reference this handout and what and where the information will be covered.

Current Topic

A short 2-3 page paper will be provided from a current dairy publication. You are expected to read that each week.

Discussion Post

There will be 2 discussion topics per week.

1. You must post an original or primary response to each topic (there will be 2 each week) by **Friday at 11:59 P.M.** of that week. The original posts will be worth 15 pts each.
2. You must respond or comment to **2 other students'/instructor posts for each topic by Wednesday 11:59 P.M. for the previous week** (4 total) of the following week. Each response to an original post will be worth 5 points for a total of 20 per week. Note: Responses to Dr. Eborn posts also count!

The syllabus/schedule are subject to change.

3. I am looking for posts that are engaging and show effort and thought. I am thinking 3-4 sentences but there is no limit. For example, posts will be graded according to the following:
 - a. Does the post show thought and understanding of an idea or concept that will allow others to further elaborate and become more connected with the subject?
 - b. Does the post raise an alternative viewpoint or insight that is different or unique that allows others to think of an idea or principle in a different way.

Posts that appear to show lack of effort or thought will result in partial or no credit.

Discussion Post Rules

- i. If needed I may suggest or ask you to alter a post that is inappropriate or inadequate in order to enhance the learning experience. In addition, I may also add a post or respond to other post to contribute to the discussion.
- ii. Remember to be civil and cordial to others and their opinions. It is OK to disagree or provide an alternative view but it can be done in a positive manner that is not personal or combative. If needed I reserve the right to take action against posts that I deem inappropriate including removal of the post, loss of points, and/or up to removal from the class.

Question and Answer

If you have any questions concerning the material, concepts, or anything else concerning the class enter your post in this section. I will get notified when someone poses a question. This way others may benefit and I don't have to repeat the answer quite as often.

Quiz

An online quiz will be available each week over the material for that week and will be due **Monday @ 11:59 P.M.** of the following week. Graduate: will be more material covered in greater depth.

Exams

Three exams will be given through the course. The exam dates will be announced in advance but will typically cover 6-7 lectures.

The syllabus/schedule are subject to change.

Research Papers:

Each week will be a selected paper for you to read and study. A follow up assignment will be given with each paper. Ex. A 2-3 page written summary.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80%-89%

C = 70%-79%

D = 60%-69%

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students will need to access eCollege and have the ability to download pdf and Microsoft Office document.

Instructional Methods

Lecture notes will be provided in written narrative, lecture notes in powerpoint slides, and short articles from magazines and extension.

Student Responsibilities or Tips for Success in the Course

Keep in mind that this is a 3 semester hour course that we are going to cover in 5 weeks or about a 1/3 of the time it would be covered in a regular 15 week fall/spring semester. I will keep try and stay aware of not giving you a bunch of busy work that is going to take up your time. I will however try and let you know what the expectations are and what I really think you should know. And you need to read, study, and ponder to commit to memory what you are learning.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80%-89%

The syllabus/schedule are subject to change.

C = 70%-79%
D = 60%-69%
F = 59% or Below

TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11

The syllabus/schedule are subject to change.

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - 512 MB of RAM, 1 GB or more preferred
 - Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:

The syllabus/schedule are subject to change.

- Sound card, which is usually integrated into your desktop or laptop computer
 - Speakers or headphones.
 - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: [JAVA web site http://www.java.com/en/download/manual.jsp](http://www.java.com/en/download/manual.jsp)
 - Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.

JavaScript is enabled.

Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - [Adobe Reader https://get.adobe.com/reader/](https://get.adobe.com/reader/)
 - [Adobe Flash Player \(version 17 or later\) https://get.adobe.com/flashplayer/](https://get.adobe.com/flashplayer/)
 - [Adobe Shockwave Player https://get.adobe.com/shockwave/](https://get.adobe.com/shockwave/)
 - [Apple Quick Time http://www.apple.com/quicktime/download/](http://www.apple.com/quicktime/download/)
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary

The syllabus/schedule are subject to change.

use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Brightspace Support

Need Help?

Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words “[click here](#)” to submit an issue via email.



System Maintenance

Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

Interaction with Instructor Statement

Typical response time will be within 24 hrs. but all emails will receive a response within 48 hours during the work week. Emails sent over the weekend may not receive a response until the beginning of the week.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: [Netiquette](#)

<http://www.albion.com/netiquette/corerules.html>

The syllabus/schedule are subject to change.

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

ADA Statement

Students with Disabilities

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 have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

The syllabus/schedule are subject to change.

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

The syllabus/schedule are subject to change.