



**AEC 380.01E – AGRICULTURAL STATISTICS
COLLEGE OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES
SPRING 2019**

COURSE SYLLABUS

Instructor

Name: Dr. Jose Lopez, Associate Professor of Agribusiness
Office location: Agricultural Science Building, Room 143
Office phone: (903) 886-5623
Office fax: (903) 886-5990
University email address: Jose.Lopez@tamuc.edu

Class Time

MWF 12:00 - 12:50 PM, AGIT Room 255

Office Hours

For immediate consultation I will be available Mondays from 10:00 a.m. – 12:00 p.m. (noon), and Wednesdays and Fridays from 2:00 – 3:30 p.m. or by appointment. You are also welcome to stop by my office at any other time. If I am unable to meet with you at that time, send me an email and we will schedule an appointment. The best way to contact me is via email at Jose.Lopez@tamuc.edu. You can also email me from D2L (myleonline.tamuc.edu). I generally answer emails within 48 hours. Students who email me after 5:00 PM can expect to receive a reply within 48 hours starting at 8:00 am of the next business day (M-F). Students who email me during holidays or over the weekend should expect a reply within 48 hours from 8:00 AM of the next regularly scheduled business day.

COURSE INFORMATION

Required Text

Statistics: Informed Decisions Using Data, by Michael Sullivan, Prentice-Hall, Inc., New York, 5th Edition, 2016. (ISBN-13: 9780134133539 or ISBN-10: 0134133536)

Note: Older editions of the textbook such as 4th or 3rd edition are also acceptable; however, the section numbering may not match. Students who decide to purchase older editions of the textbook are responsible for matching the section numbering provided in the course calendar (refer to Course Calendar at the end of this syllabus) with the section numbering in their textbook.

Prerequisites

Math 1314 (MATH 141) or MATH 1324 (MATH 175) or Higher Math.

Teaching Philosophy

1. A course must deliver information, concepts and methods that will be useful in the student's professional life. However, learning analytical reasoning skills and improving the ability to process and use information efficiently is more important than memorizing facts and formulas and performing procedures repeatedly.
2. Students learn best when theories, concepts and procedures are explained in plain language as well as formally, and are complemented with examples or applications that are relevant to the students.

Character Formation

It is important during your graduate education to learn the values and rewards of hard work, responsibility, and honesty. The professor will promote character formation while teaching the course.

Course Description

Principles and estimation techniques used in the analysis of agricultural data including measures of central tendency and dispersion, probability, sampling, hypothesis testing, analysis of variance, correlation coefficient, and regression.

Student Learning Outcomes

Upon satisfactory completion of the course the students will be able:

- To compute measures of central tendency and dispersion, and use them to analyze datasets.
- To summarize datasets using measures of central tendency and dispersion, diagrams and boxplots.
- To compute linear relationships among variables and use them for prediction.
- Measure the correlation between two agricultural variables and explain the difference between correlation and causation.
- To explain how linear regression is used to make predictions.
- To conduct hypothesis tests (t tests, and z tests) using one sample.
 - To determine null and alternative hypotheses, explain Type I and Type II errors, and state conclusions to hypothesis tests for population mean with known or unknown population standard deviation and for a population proportion.
- To conduct hypothesis tests (t tests, and z tests) using two samples.
 - To determine null and alternative hypotheses, explain Type I and Type II errors, and state conclusions to hypothesis tests for two means when samples are dependent, two means when samples are independent, and two population proportions.
- To conduct hypothesis tests regarding a probability distribution, hypothesis tests regarding two categorical variables from one population (chi-square test for independence), and hypothesis tests regarding two or more populations for one categorical variable (chi-square test for homogeneity of proportions).
- To conduct hypothesis tests for three or more means using one-way analysis of variance (one-way ANOVA).
 - To determine null and alternative hypotheses, explain Type I and Type II errors, and state conclusions to hypothesis tests for three or more means
- To conduct post hoc tests on one-way ANOVA using Tukey test.
- To summarize the conclusions of Tukey test.

Topics

Part I: Getting the Information You Need

Chapter 1: Data Collection

Section 1.1: Introduction to the Practice of Statistics

- Concept and process of statistics; concepts of population, sample, individual, descriptive statistics, inferential statistics, parameter, statistic, qualitative variables, and quantitative variables (discrete and continues); levels of measurement of variable (nominal, ordinal, interval, and ratio).

Part II: Descriptive Statistics

Chapter 3: Numerically Summarizing Data

Section 3.1: Measures of Central Tendency

- Discussion, computation, and interpretation of measures of central tendency (mean, media, and mode) and the relationships between them; explanation of resistance.

Section 3.2: Measures of Dispersion

- Discussion, computation, and interpretation of measures of dispersion (range, variance, and standard deviation) and the relationships between them; use of the empirical rule to describe data that are bell shaped (percent of observations lying within one two, and three standard deviation from the mean); use of Chebyshev's Inequality to determine the minimum percentage of the observations that fall within k standard deviations of the mean (for k values greater than 1).

Section 3.3: Measures of Central Tendency and Dispersion from Grouped Data

- Approximation of the mean, variance, and standard deviation of a variable from data that summarized in frequency distributions; calculation of a weighted mean

Section 3.4: Measures of Position and Outliers

- Explanation of measures of positions (the z-score, the percentile, the interquartile, the interquartile range, and outliers); computation and interpretation z-scores, percentiles, quartiles, and interquartile range; checks for outliers.

Section 3.5: The Five-Number Summary and Boxplots

- The five-number summary; boxplots and their use to describe the shapes of distributions.

Chapter 4: Describing the Relation between Two Variables

Section 4.1: Scatter Diagrams and Correlation

- Explanation of response and a predictor variables; drawing and interpretation of scatter diagrams; relationships between two variables (linear and non-linear, and positively and negatively associated; properties, computation, and interpretation of the linear correlation coefficient; discussion of confounding and lurking variables.

Section 4.2: Least-Squares Regression

- Computation of equations of the lines with emphasis on the least-squares regression line; predictions made by using equation of lines; calculation and interpretation of slopes and vertical and horizontal intercepts; assumptions of the least-squares regression line; parameter estimates, significance, and confidence intervals; properties of the least-squares regression line; computation and use of the sum of squared residuals to comment on the fit of a line.

Section 4.3: The Coefficient of Determination

- Use of the coefficient of determination (R^2) to measure the linear relation that exists between two quantitative variables; computation and interpretation of the R^2 and its

properties; distinction, graphical interpretation, and interpretation of total deviation, explained deviation, and unexplained deviation.

Section 14.3: Multiple Regression

- The multiple regression model; assumptions; estimation, interpretation, significance, and confidence intervals of parameter estimates; measures of goodness of fit, the standard error of the regression, the coefficient of determination, and the adjusted coefficient of determination.

Part III: Inference

Chapter 10: Hypothesis Tests Regarding a Parameter

Section 10.1: The Language of Hypothesis Testing

- Determination of the null and alternative hypothesis; explanation of Type I and Type II errors; and stating conclusions to hypothesis testing.

Section 10.3: Hypothesis Tests for a Population Mean

Population Standard Deviation Known

- Hypothesis testing about a population mean with standard deviation known using the classical approach, using P-values, and using confidence intervals with small and large samples; consideration one and two tail tests; discussion of statistical significance and practical significance.

Population Standard Deviation unknown

- Hypothesis testing about a population mean with standard deviation unknown using the classical approach, using P-values, and using confidence intervals with small and large samples; consideration of one and two tail tests.

Section 10.2: Hypothesis Tests for a Population Proportion

- Hypothesis testing about a population proportion with small and large samples; consideration of one and two tail tests; construction of confidence intervals

Section 10.5: Putting It Together: Which Method Do I Use?

- Determination of the appropriate hypothesis test to perform.

Chapter 11: Inferences on Two Samples

Section 11.2: Inferences about Two Means: Dependent Samples

- Hypothesis testing regarding the difference of two dependent means using the classical approach, using P-values, and using confidence intervals. Discussion of matched-pairs data and hypothesis test requirements.

Section 11.3: Inferences about Two Means: Independent Samples

- Hypothesis testing regarding the difference of two independent means using the classical approach, using P-values, and using confidence intervals. Discussion of completely randomized designs, hypothesis test requirements, equal and unequal population standard deviations, Welch's approximate t , and pooled two-sample t -tests.

Section 11.1: Inference about Two Population Proportions

- Hypothesis testing regarding the two population proportions from independent samples using the classical approach, using P-values, and using confidence intervals. Discussion of completely randomized designs, hypothesis test requirements, the pooled estimate of p , sample size necessary for estimating the difference between two population proportions.
- Hypothesis testing regarding the two population proportions from dependent samples using the classical approach, using P-values, and using confidence intervals. Discussion of matched-pairs data, hypothesis test requirements, McNemar's test,

contingency tables, sample size necessary for estimating the difference between two population proportions.

Chapter 12: Inference on Categorical Data

Section 12.1: Goodness-of-Fit-Test

- Hypothesis tests regarding a probability distribution. Discussion of the chi-square distribution, mutually exclusive outcomes, expected counts, hypothesis test requirements, chi-square test statistic, chi-square critical values, and stating conclusions.

Section 12.2: Tests for Independence and the Homogeneity of Proportions

- Hypothesis tests regarding two categorical variables from one population (chi-square test for independence). Discussion of expected counts, hypothesis test requirements, contingency tables, chi-square test statistic, chi-square critical values, calculation of p-values, and stating conclusions.
- Hypothesis tests regarding two or more populations for one categorical variable (chi-square test for homogeneity of proportions). Discussion of expected counts, hypothesis test requirements, contingency tables, chi-square test statistic, chi-square critical values, calculation of p-values, and stating conclusions.

Chapter 13: Comparing Three or More Means

Section 13.1: Comparing Three or More Means (One-Way Analysis of Variance)

- Hypothesis testing regarding three or more means using one-way ANOVA. Discussion of hypothesis test requirements, between-sample variability versus within sample variability, mean square due to treatments, mean square due to error, F-test statistic, ANOVA tables, F-critical values, calculation of p-values, and stating conclusions.

Section 13.2: Post Hoc Test on One-Way ANOVA

- Perform the Tukey Test

GRADING

Grading

Exam 1	23.33%
Exam 2	23.33%
Exam 3	23.34%
Quizzes and/or Lab Assignments	20.00%
Attendance and participation	10.00%
	<hr/>
	100.00%

Note: There would be an optional final comprehensive exam (Exam 4). The optional final comprehensive exam will replace your lowest exam grade (if you decide to take it). All your grades will be available in D2L, the learning management system used by Texas A&M University-Commerce.

Grading Scale

<u>Range</u>	<u>Grade</u>
90-100.00	A
80-89.99	B
70-79.99	C
60-69.99	D
Less than 60	F

Exams

No makeup exams will be offered. If you miss an exam, I strongly recommend that you take the optional final comprehensive exam (Exam 4) which will replace your missed exam grade (if you decide to take it).

Quizzes

Quizzes will be graded and discussed in class. Quizzes should be considered very important material for exams. Quizzes will be either pop-quizzes or announced in class.

Lab Assignments

Computer lab assignments will be graded and discussed in class. Computer lab assignments will test your understanding of the applications of statistics to situations you may encounter in your professional career. In these computer labs, you will learn the use Microsoft Excel to solve practical problems and make informed decisions using data. Students will be required to submit their individual answers via eCollege according to the deadlines announced in class.

Review Questions

Review questions will NOT be graded. Students are welcome to ask questions during office hours. Review Questions are designed to help you understand and/or highlight the material you should understand after you complete a module. The students are NOT required to submit their answers to the Review Questions.

Practice Questions

Practice questions will be selected from the textbook. Practice questions will not be graded but should be considered important material for quizzes and exams. Students are encouraged to ask questions during class or during office hours.

Class Attendance

A maximum of 3 unexcused absences will be allowed. Each additional unexcused absence will reduce your earned attendance grade by 2.22 points (45 meetings * 2.22 \approx 100 points). The student is expected to use the unexcused absences for the days he/she gets sick or cannot attend to class because of a non-serious foreseeable or unforeseeable cause (e.g., flat tires, car problems, not feeling well, doctor and dentist appointments, visits to health clinics, field trips, sport activities and events, etc.). Excused absences must be for serious and unforeseeable causes, and fully documented. The instructor will pass attendance every class day during the first 5 minutes, except for exam and/or quiz days. If you are late, but arrive during the first 15 minutes of class, you should contact the instructor at the end of the class and you will earn $\frac{1}{2}$ of a regular class attendance. It is your responsibility to contact the instructor in these cases. Similarly, if you come to class, you are required to stay until the end of the class period; otherwise, you will earn $\frac{1}{2}$ of a regular class attendance.

Class Participation

Students should come to class prepared by reading and completing course assignments prior to class. It is the students' responsibility to be familiar with and understand all previously covered material prior to each new lecture. Class participation is about answering the instructor's questions and/or providing your constructive comments, ideas, or opinion when discussing examples,

homework, and in-class exercises. Students are encourage to ask questions when they do not understand the class material.

TECHNOLOGY REQUIREMENTS

This course will be enhanced using D2L, the learning management system used by Texas A&M University-Commerce. Students will be required to download PowerPoint presentations and other important class material from the D2L website for the course.

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
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
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:
 - 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](https://get.adobe.com/flashplayer/) (*version 17 or later*) <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

This course will be enhanced using D2L, the learning management system used by Texas A&M University-Commerce. To access the ancillary material provided online, go to:
myleonline.tamuc.edu

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 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.

COMMUNICATION WITH INSTRUCTOR

Interaction with Instructor Statement

The primary form of communication with the class will be in class. Occasionally, I will post Announcements in the D2L website for the course and/or contact students via email. Any changes to the syllabus or other important information critical to the class will be announced in class.

During regular working days and hours (M-F from 8:00 AM – 5:00 PM), I generally answer emails within 48 hours. Students who email me outside of regular working days and hours can expect a reply within 48 hours from 8:00 AM of the next business day (M-F). Students who email me during holidays or over the weekend should expect a reply within 48 hours from 8:00 AM of the next regularly scheduled business day.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures

Academic Honesty

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including (but not limited to) receiving a failing grade on the assignment, the possibility of failure in the course and dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. In **ALL** instances, incidents of academic dishonesty will be reported to the Department Head. Please be aware that academic dishonesty includes (but is not limited to) cheating, plagiarism, and collusion.

Cheating is defined as:

- Copying another's test or assignment
- Communication with another during an exam or assignment (i.e. written, oral or otherwise)
- Giving or seeking aid from another when not permitted by the instructor
- Possessing or using unauthorized materials during the test
- Buying, using, stealing, transporting, or soliciting a test, draft of a test, or answer key

Plagiarism is defined as:

- Using someone else's work in your assignment without appropriate acknowledgement
- Making slight variations in the language and then failing to give credit to the source

Collusion is defined as:

- Collaborating with another, without authorization, when preparing an assignment
- If you have any questions regarding academic dishonesty, ask. Otherwise, I will assume that you have full knowledge of the academic dishonesty policy and agree to the conditions as set forth in this syllabus.

Attendance Policy

Students are expected to attend class and actively participate. Student participation/activity will be monitored by the professor. Students should plan to dedicate approximately 15-20 hours/week of time to this course.

APA Citation Format Policy

It is very important that you learn how to cite properly. In some ways, citations are more important than the actual text of your paper/assignment. Therefore, you should take this task seriously and devote some time to understanding how to cite properly. If you take the time to understand this process up front, it will save you a significant amount of time in the long run (not to mention significant deductions in points).

In the social and behavioral sciences, we generally follow the APA (American Psychological Association) formatting style. As a rule of thumb, one cites whenever they are paraphrasing other people's words or when they quote other's words directly. You may learn to cite from a variety of different sources including the APA Tutorial and the sources listed below and in the Getting Started section of your course.

www.apastyle.org

<http://owl.english.purdue.edu/owl/resource/560/02/>

www.library.cornell.edu/resrch/citmanage/apa

It is the student's responsibility to understand how to cite properly. If you have questions, feel free to ask.

Late Work

It is the student's responsibility to plan accordingly and submit their assignments in a timely manner. Class assignments will be announced by the instructor during regular class time. The instructor reserves the right to assign a grade of zero to any late assignment.

Drop Course Policy

Students should take responsibility for dropping themselves from the course according to University policy should this become necessary.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance

University Specific Procedures

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 132

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

Fax (903) 468-8148

University Email address: StudentDisabilityServices@tamuc.edu

University Website address:

<http://www.tamuc.edu/campuslife/campuservices/studentDisabilityResourcesAndServices/default.aspx>

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. See Student's Guide Handbook, Rules and Procedures, Code of Student Conduct

(<http://www.tamuc.edu/CampusLife/documents/studentGuidebook.pdf>).

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <http://www.albion.com/netiquette/corerules.html>

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.

Counseling Center

A student that faces a crisis or a serious and unforeseeable event that affects his/her class performance must contact the Counseling Center, Student Services Building, Room 204, Phone (903) 886-5145. If important class material or course assignments are missed because of such crisis or event, the student must contact the instructor as soon as possible.

Campus Concealed Carry

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 (<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>) and/or consult your event organizer). 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.

IMPORTANT DATES

Jan 14 th , Monday	First day of this class.
May 3 th , Friday	Last day of this class.
May 10 th , Friday	Optional Final Comprehensive Exam, 8:00 - 10:00 AM

COURSE CALENDAR

Every effort will be made to adhere to the course calendar below. However, unforeseen circumstances may require changes to the course calendar. In that case, changes will be announced during regular class time. The professor reserves the right to change the course calendar if necessary and depending on the progress of the class.

AEC 380.01E AGRICULTURAL STATISTICS
Course Calendar, Spring 2019
MWF 12:00 - 12:50 p.m.

Week	Subject/Material Covered
Week 1 Jan 14 – 18	Syllabus Sec. 1.1: Intro. to the Practice of Statistics
Week 2 Jan 21 – 25	Sec. 3.1: Measures of Central Tendency Sec. 3.2: Measures of Dispersion
Week 3 Jan 28 – Feb 1	Sec. 3.3: Measures of Central Tendency and Dispersion from Grouped Data. Sec. 3.4 + 3.5: Measures of Position, Outliers, and Boxplots
Week 4 Feb 4 – 8	Exam 1 (Sec. 1.1 + CH03)
Week 5 Feb 11 – 15	Sec. 4.1: Scatter Diagrams and Correlation
Week 6 Feb 18 – 22	Sec. 4.2 + 4.3 + 14.3: Least-Squares Regression and Diagnostic
Week 7 Feb 25 – Mar 1	Sec. 4.2 + 4.3 + 14.3: Least-Squares Regression and Diagnostic Sec. 10.1: The Language of Hypothesis Testing
Week 8 Mar 4 – 8	Sec. 10.1: The Language of Hypothesis Testing Sec. 10.3: Hypothesis Tests for a Population Mean
Week 9 Mar 11 – 15	Sec. 10.3: Hypothesis Tests for a Population Mean Sec. 10.2: Hypothesis Tests for a Population Proportion Sec. 10.5: Putting It Together: Which Method Do I Use?
Week 10 Mar 18 – 22	SPRING BREAK (No Class)
Week 11 Mar 25 – 29	Exam 2 (CH03 + CH04 + CH10)
Week 12 Apr 1 – 5	Sec. 11.2 + 11.3 + 11.1: Inference on Two Samples

Week 13 Apr 8 – 12	Sec. 11.1: Cont. Sec. 12.1 + 12.2: Inference on Categorical Data
Week 14 Apr 15 – 19	Sec. 12.2: Cont.
Week 15 Apr 22 – 26	Sec. 13.1: One-Way ANOVA Sec. 13.2: Post Hoc Tests on ANOVA
Week 16 Apr 29 – May 3	Sec. 13.2: Cont. Exam 3 – (CH11, CH12, CH13)
Week 17 May 10	Exam 4 – Optional Final Comprehensive Exam Sec. 1.1, CH03, CH04, CH10, CH11, CH12, CH13 8:00 - 10:00 AM