

Math 453-01W

# **ESSENTIALS OF STATISTICS**

COURSE SYLLABUS: Spring 2024

### **INSTRUCTOR INFORMATION**

Instructor: Dr. Brenda Reed Office Location: WCB 110 (on the Corsicana campus) Office Hours: MW 8:45 – 10:50, T 8:00 – 10:50 Office Phone: 903-875-7515 University Email Address: <u>brenda.reed@tamuc.edu</u> or Brenda.reed@navarrocollege.edu Preferred Form of Communication: **email** Communication Response Time: within 24 business hours

# **COURSE INFORMATION**

Textbook(s) Required: None

Software Required: Access code for MyStatLab (Pearson) and a graphing calculator (TI-83 or 84 is preferred)

Optional Texts and/or Materials: Optional text is Elementary Statistics by Larson in the 7<sup>th</sup> edition ISBN# 13: 9780134683416 You will have access to the ebook in MyStatLab, so there is not a need to purchase this.

### **Course Description**

Essential of Statistics. Three semester hours. Techniques of statistical applications concerning descriptive statistics, tests of hypothesis, regression and analysis of variance. Prerequisite: One course in college mathematics.

# **Student Learning Outcomes**

Upon successful completion of this course, students will:

1. Explain the use of date collection and statistics as tools to reach reasonable conclusions.

- 2. Recognize, examine and interpret the basic principles of describing and presenting data.
- 3. Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.
- 4. Explain the role of probability in statistics.
- 5. Examine, analyze and compare various sampling distributions for both discrete and continuous random variables.
- 6. Describe and compute confidence intervals.
- 7. Solve linear regression and correlation problems.
- 8. Perform hypothesis testing using statistical methods.

# COURSE REQUIREMENTS

### Minimal Technical Skills Needed

Students need to login to D2L regularly and view the course schedule on a weekly basis. Students need to also check their email regularly for course announcements. Access to MyStatLab and a computer with reliable internet will be required for this online course. Students will also be required to know how to use their graphing calculator (a TI-82 or TI-84) on exams.

<u>Calculator Loan Program</u>: The Mathematics Department has set up a calculator loan program to support students. Students can borrow a calculator for the semester with a fee (\$10 to \$15 for TI-83/84). It is on a first come, first serve basis.

### **Instructional Methods**

You will be expected to read the text, watch videos, and complete homework problems in MyStatLab for each sections covered. This is how you learn the content. You have 3 attempts at each homework assignment if you wish to use them to raise your grade. Multiple sections will be due on the same day. In addition, quizzes over multiple sections will be administered online.

### Student Responsibilities or Tips for Success in the Course

You are expected to regularly login to the course and pace yourself throughout the week in order to have all weekly assignments done on time. Assignments completed after the due date will incur a 15% late penalty. On average, you should spend 6-9 hours per week working on this course in order to be successful.

\*\*\*Students are required to complete homework using MathXL software.\*\*\* Homework is due by the posted dates in D2L and in MyMathLab. It is extremely important for you to work ALL homework in order to be prepared for the exams. If you are not keeping up with the work in the course, it will most likely be obvious in your homework and test grades.

If a student experiences any technical difficulties with MyMathLab, be sure to use the online help and technical support from the software company. If a student continues to

have trouble accessing or navigating the software, please contact the instructor through email, phone, or come by his/her office during office hours for some individual help.

The Math Skills Center, located in Binnion 328, is open M – F and should begin tutoring immediately following Labor Day. Free tutoring is available for students who need help with their math courses. **The ATC is located in Journalism 113 and this is where you will be taking your midterm and final exams.** In addition, the Academic Success Center also offers supplemental instruction/tutoring for students and their hours can be found at the university website. The Mach III/TRIO Program is available for students who qualify for additional resources, such as private tutoring. In order to qualify, students must meet certain conditions, such as being a first-generation college student. For more information, contact TRIO at 903-886-5833.

### 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% F = 59% or Below

Your grade will be weighted as follows:

10% of average
20% of average
20% of average
25% of average
25% of average

#### Assessments

There will be a Midterm Exam and a non-comprehensive Final Exam. You will have 2 hours for each exam. If you are not located on the Commerce campus, please contact me directly and let me know which college is close to you. We will work out a college testing center for you to attend for these two exams based on your location. The mathematics department has a policy that exams will be taken in person and are not offered via Zoom.

# **TECHNOLOGY REQUIREMENTS**

#### LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements: <a href="https://community.brightspace.com/s/article/Brightspace-Platform-Requirements">https://community.brightspace.com/s/article/Brightspace-Platform-Requirements</a>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\_support.htm

YouSeeU Virtual Classroom Requirements: <u>https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-</u> <u>Requirements</u>

# 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 <u>helpdesk@tamuc.edu</u>.

**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**

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. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

#### Interaction with Instructor Statement

It is important that students are actively engaged in all assignments. Questions are welcome by emailing the instructor and will be answered within 24 business hours. In addition, you are welcome to stop by during office hours.

### COURSE AND UNIVERSITY PROCEDURES/POLICIES

#### **Course Specific Procedures/Policies**

Any late work will be subject to a 15% penalty. Exams not taken by the due date will result in a zero.

#### **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**

#### **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 <u>Student Guidebook</u>. <u>http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as</u> <u>px</u>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <u>https://www.britannica.com/topic/netiquette</u>

#### **TAMUC Attendance**

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>. 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

# Students with Disabilities-- ADA Statement

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: <u>studentdisabilityservices@tamuc.edu</u> Website: <u>Office of Student Disability Resources and Services</u> <u>http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ</u> <u>ices/</u>

#### **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 <u>Carrying Concealed Handguns On Campus</u> 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.

# **Counseling Services**

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, education programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

# **COURSE OUTLINE / CALENDAR**

Please see the weekly schedule in D2L for all due dates.