

Course Syllabus: Math 1342.01W – Elementary Statistics Summer II 2024 (Online Course)

Date: July 8, 2024, to August 8, 2024

Instructor: Dr. KaSai Un Office Location: Online Via Zoom Office Hours: Tuesday and Thursday 11 am to 1 pm and/ or by appointments Office Phone: 903-886-5157 (main office) Office Fax: 903-886-5945

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Preferred Form of Communication: **Email (with subject Math 1342...)**Zoom link and password will be shared within D2L for security purpose

Communication Response Time: Within 24 hours M-F, 48 hours over weekends or holidays

COURSE INFORMATION

Materials - Textbooks, Readings, Supplementary Readings:

- 1) MathXL Online HW System by Pearson with Textbook Chapters Access (Required): A subscription of a minimum of 6 months of MathXL by Pearson is required. MathXL is an online homework system with textbook chapters access. The subscription can be purchased directly online at http://www.mathxl.com. Please select the option of "not using an LMS" (for \$74.99 + taxes).
- 2) Printed Textbook (Not Required): Statistical Reasoning for Everyday Life, 5th edition, by Bennett, Briggs, and Triola. Published by Pearson, 2018. ISBN-10 # 0-13-449404-0; ISBN-13: 978-0-13-449404-3 is recommended. You can read the selected chapters when you use MathXL for HW problems. You can also buy or rent a used one (for maybe about \$20). You can also access the textbook in the math skills center in Bin 328.
- 2) Please get a **Binder** to keep and organize all notes by chapters. You are required to upload your notes to D2L for daily grades. The instructor may check your notebook during the semester for credits. In addition, post-it notes, stapler, ruler, colored pencils, dice, coins, and a deck of cards may be useful for activities.
- 3) Access and complete the daily lessons, daily work, and course materials on D2L. You should also check your MyLeo email account each class day for class communication. Lessons information will be posted on D2L under "announcement" and also under "content" with daily lesson video links. Course materials and take-home quizzes will be posted on D2L. In addition, students' grades for the course can be accessed on D2L.

To access your lessons, please log on to MyLeo from the university homepage. Log on MyLeo and click on the "Apps" tab on top menu and access "MyLeo Online (D2L Brightspace)" app. After that, click on the grid that looks like this so on the next screen. Select Math 1342 from the list of courses that you are taking. Then click on the tab "Content" on the top left corner of the screen. The daily lessons will be posted there, and they will also be emailed to you and posted under "announcement".

- 4) Texas Instruments (TI-83 or TI-83 Plus) graphing calculator for this course is highly recommended and will be used throughout the course. However, if you don't have one, a scientific calculator can work for most parts of this class. Please try to borrow a graphing calculator to use for chapter 7 materials if you don't own one. If you choose to use a different calculator, please note that the instructor will not be a good resource for you to be able to use your calculator.
- 6) Computer or tablet with stable internet access is essential to the success of students in this class for the access of online lessons and to submit work. A scanner or a cell phone with a free scan app (CamScanner or Adobe Scan is recommended) that allows you to scan work out steps to a pdf file is required.
- 7) Access to a printer to print out class handouts.
- 8) We will use Google Docs and Excel for projects, so you don't have to buy additional software.
- 9) Exams and turn in work should be done with paper and pencil.

Course Description:

Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals, and hypothesis testing. Appropriate technology will be used. Prerequisites: TSI complete.

Student Learning Outcomes:

Upon successful completion of this course, students will:

- Explain the use of data collection and statistics as tools to reach reasonable conclusions.
- Recognize, examine, and interpret the basic principles of describing and presenting data.
- Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.
- Explain the role of probability in statistics.
- Examine, analyze, and compare various sampling distributions for both discrete and continuous random variables.
- Describe and compute confidence intervals.
- Solve simple linear regression and correlation problems.
- Perform basic hypothesis testing using statistical methods.

Core Objectives:

Critical Thinking. Students will be able to analyze, evaluate, or solve problems when given a set of circumstances, data, texts, or art. This common core learning objective will be assessed on exams using key questions that will fulfill these objectives.

Communication. In written, oral, and/or visual communication, Texas A&M University-Commerce students will communicate in a manner appropriate to audience and occasion, with an evident message and organizational structure. This common core objective will be assessed using class activities with class discussion of statistical identities, graphs, and application problems.

Empirical and Quantitative Skills. Students will be able to interpret, test, and demonstrate principles revealed in empirical data and/or observable facts. This common core learning objective will be assessed using in class discussion, projects, homework, and exams.

COURSE REQUIREMENTS

Minimal Technical Skills Needed:

This course is an ONLINE course. The content for the course will be posted in your MyLeo Online account. Content, quizzes, and activities must be accessed through MyLeo D2L. Homework will be on MathXL. Thus, students must have a minimal number of technical skills to be successful in this course. Skills needed include but are not limited to using the online learning system (D2L) in MyLeo, a scanner or scan app on phone, Google Doc, Microsoft Word, Excel, and PowerPoint, and the use of MyLeo email.

Instructional Methods: There will be YouTube lesson videos that are recorded by the instructors along with guided notes for each section of chapters that we covered. Students can access them on D2L under "Announcements" and also with the daily lesson links under "Content". All videos SHOULD BE WATCHED AND STUDNETS NEED TO TAKE DETAILTED NOTES FROM THEM in order to understand the material. Students will upload notes to receive participation credit for each class. Instruction will include lectures, demonstrations, and models, based on the time available throughout the semester. In addition, students will be expected to work on projects and activities that deal with real world applications of the material.

Student Responsibilities/ Tips for Success in the Course:

Attendance/ Participation: Online class required learners to be self-motivated to keep up with the pacing of the course. It is recommended for students to spend about 3 hours each class day (Monday to Friday each week, so about 15 hours each week) to view instructional videos, take notes, do HW and class activities online, and review the materials. You earn class participation points by continue to log on D2L to view course videos, upload your notes, complete assignments & activities, attend tutoring, study for exams, and complete face-to-face exams. Attendance and participation (online) are a must to be able to do well in this class.

If students represent an athletic team for this university, departmental team, scholastic team, choir, or other group and must miss class, notify me in writing with the appropriate documentation within one week of the absence in order not to be counted absent. Arrangements for make-up work will be made at that time.

GRADING

Grading Policy:

Type of Assessment: Portion of	the Grade:
Daily Work (Attendance, Notes, Homework, Quizzes, Surveys, Activities, and Projects)	25 %
Three Exams	50 %
Mandatory Comprehensive Final Exam	25 %
Total	100%

Grading Scale: Grades will be assigned using the standard scale:

A = 90-100+, B = 80-89, C = 70-79, D = 60-69, F = 59 or below

According to the TAMU-Commerce catalog, Math 1342 <u>CANNOT BE DROPPED</u> if it serves as your first college-level math course.

<u>Note:</u> In general, a "C" grade is considered passing for this course. However, for certain majors, a grade of "D" for this course can also be considered as passing, please check with your advisor for clarification if needed.

Types of Grades/Assessments:

Daily Grades: The daily grade is composed of several categories of assessments, including attendance, viewing lesson videos, taking notes, uploading class notes to D2L, and guizzes.

Homework on MathXL: Homework will be assigned most class periods and done on MathXL. It is very important for you to do all homework in order to be prepared for the exams. The total number of assignments that are completed on MathXL and turned in (punctually) by the student will be reflected in the Daily Work grade. Please do not wait until the due date to complete your homework to avoid emergency situations or run into technically difficulties.

Projects: will be posted MathXL. Problems in statistics that have interesting applications for the class and real life will be introduced periodically into the class discussion. Many of the projects will allow students to use statistical computing software. Projects will vary in scope and should be completed neatly and punctually. Be sure to pay attention to class announcements to participate in the class activities.

Paper Quizzes and D2L Quizzes: Quizzes will be on D2L and be given periodically. Be sure to keep up with their due dates. **No** make-up quizzes will be given, but there will be opportunities to earn extra points for quizzes. Be sure to "attend" all classes and pay attention to class announcements to not to miss any opportunities.

<u>Exams</u>: There are three scheduled regular exams this semester and a Mandatory comprehensive final exam (so, 4 total exams). Exams are taken at on-campus testing center (ATC) or an approved f2f testing center. The time options for proctored exams will be shared with students on D2L.

There will be THREE exams which may consist of a variety of problems and short answer questions. However, students should expect the bulk of the questions on each test to be problem solving. Partial credit may be given on exams IF all work is neatly shown so that I can easily determine the student's mistakes. When pictures are drawn, students should be careful that figures are clearly marked and easily understood. Explanations should be explicit and understandable to the audience given. Items should NOT need interpretation if full credit is to be given.

All exams are taken in a face-to-face approved testing center. They will be closed book HAND-WRITTEN paper exam where you must show complete work on all problems for full credit. You will have up to 75 minutes for each exam and 120 minutes for the final exam. A practice exam and answer key will be provided prior to the exam. Partial credit may be given on exams IF all work is neatly shown for determination of the student's mistakes. CELL PHONES AND OTHER ELECTRONIC DEVICES MUST BE TURNED OFF AND STORED OUT OF THE STUDENT'S REACH. The only electronic device allowed during tests and quizzes is a stand-alone calculator (such as a TI-34, TI-83, TI-84, etc.), and only with the instructor's permission. All exams must be completed in pencil; failure to complete your exam in pencil will result in a reduction of the earned grade by 5 points.

When testing, CELL PHONES and other electronic devices must be turned off and stored out of reach. The only electronic device allowed during tests and quizzes is an approved stand-alone

calculator, and only with the instructor's consent. Note: Calculators that solve problems for students, including but not limited to the TI-NSpire, Tli-89, Casio Prizm, Casio Touch, or higher, are NOT allowed to be used for exams. Calculators are required to be clear before and after each exam.

You will be responsible for scheduling a time with me to test in the **Academic Testing Center** (Journalism 113) or scheduling a time directly with the nearest approved testing center (you must send information to me for approval during the first week of class). Off-campus testing center may charge a fee for students to take an exam there. Students are responsible for any testing fees if they choose an off-campus testing center.

When it is time for each of the regular exams, I will tell you "the day" that you must take the exam. You pick the approved day and time, email me (for the ATC) or call your approved testing center to set up your time, and then show up to take the test on paper at the testing center with your **photo ID card**. Please make sure you note the testing center closing times to be sure you have enough time for the exams. The comprehensive final exam must be taken according to the exact date given below. No make-up exams will be given without prior notice of a university excused absence*.

A Practice exam and answer key will be available prior to each exam.

Be sure to take advantage of this valuable resource!!

These test dates are tentative and are subject to change: See Class Schedule on the last page.

* University Authorized Excuses: 1) Participation in a required/authorized university activity; 2) Verified illness;3) Death in a student's immediate family; 4) Obligation of a student at legal proceedings in fulfilling responsibility as a citizen; and others determined by individual faculty to be excusable (e.g., elective University activities, etc.)

Replacing a Low Test Grade: we realize that at times throughout the semester, emergency situations may arise that affect a student's performance on an exam or even prevent a student from attempting a test. However, in general, make-up exams will NOT be given unless confirmed ahead of time and accompanied by a documented, university excused absence. Therefore, I am willing to replace the student's ONE lowest exam grade with the student's grade on the corresponding portion of the MANTAORY final exam, provided the grade on that section of the final exam is higher. This provision will only be applied to ONE exam, so students should make every effort to attempt and be well-prepared for all exams.

Mandatory Final Exam (Thursday, August 8, 2024):

The final exam will be a comprehensive exam. Part of the final exam can also be used to replace ONE lowest exam grade.

TECHNOLOGY REQUIREMENTS

Instructor Specific Technology Requirements:

Calculator: A TI-83 or TI-84 calculator (or equivalent) is RECOMMENDED for this course.

A computer with stable internet access is REQUIRED. HW, quizzes, and projects are given online. If you use the eBook through MathXL, you will need to be able to access it online.

A webcam OR a built-in camera on a laptop/tablet/phone is REQUIRED. These are used when you participate in online meetings with your instructor through zoom. These meetings will be recorded in case the department wants to review them.

Word processing software is REQUIRED. (Microsoft Word preferred/compatibility required)

Access to D2L of this class and MyLeo Email access are REQUIRED. Please utilize your A&M-Commerce (_____@leomail.tamuc.edu) email address.

Scanner: A scanner or scan app MUST be used for uploading work to D2L; **NOT just** the camera on your phone or tablet. Works must be loaded as .pdf files, **NOT** as .jpg files. This allows for an easy upload and download and clean documents (no black outlines/edges, etc.) I have personal experience with the free apps Cam Scanner and Adobe Scan (a tutorial video will be available in D2L), but there are several apps available. Many are free, including the "basic" version of Cam Scanner, even if they ask for money... you should still be able to use the free version for this course. As long as it will load to MyLeo as a .pdf and there aren't a lot of dark edges, extra items in the background, or shadows on the pages, you should be okay.

MyLeo Online Learning Management System (LMS)

D2L in MyLeo: All course sections offered by Texas A&M University-Commerce have a corresponding course shell in MyLeo. Below are technical requirements.

LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

MyLeo Support: You will need your campus-wide ID (CWID) and password to log into your course in D2L. 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

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

Interaction with Instructor Statement: Students will be expected to interact with the instructor(s) in class or via electronic means in an appropriate manner. All instructor contact information is listed on this syllabus and should be used. Please use email to facilitate a quick response.

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

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Getting Help Outside of Office Hours:

Free tutoring is available for students who need help with their math courses.

The Math Skills Center, located in Binnion 328, is open Monday to Thursday 10 am – 3 pm.

The <u>Academic Success Center</u> offers tutoring in the library, as well as Supplemental Instruction. Their hours can be found on the university web site. Also, each student has available tutoring hours through the online tutoring service, tutor.com. Additional details can be found here: https://www.tamuc.edu/campusLife/campusServices/academicSuccessCenter/tutorInfo/default.aspx (Please confirm this is available during the summer session before going to this location).

Online Tutoring: Each students receive 3 free hours from www.tutor.com/tamuc. Use your MyLeo Log in and Password to access this. You can contact the instructor if you need additional free tutoring hours.

In addition, <u>Mach III/TRIO Services</u>, located in the Halladay Student Services building, Room 300, is available to students who meet certain criteria, such as being a first-generation college student, etc. Contact TRIO at 903-886-5833.

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 **Student Guidebook** (See link below). All students are expected to exercise self-discipline and respect for the rights of others at all times. Behavioral disruptions that interfere with the business of the "classroom" or with an individual's ability to learn may be referred to the Dean of Students. Courtesy to others is important. That means respecting the opinions of others, and in general, doing your part to make this a positive learning environment for all students.

The Code of Student Conduct is described in detail in the Student Guidebook https://www.tamuc.edu/office-of-student-rights-and-responsibilities/student-code-of-conduct/ Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

<u>TAMUC Attendance</u>: 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

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: <u>Undergraduate Academic Dishonesty 13.99.99.R0.03</u>

As stated in the Student Handbook, academic dishonesty in the class will not be tolerated. If any materials or equipment are found to be available to the student at any time which is considered inappropriate by the instructor, the very fact that the materials are inappropriately available to the student is grounds for an accusation of academic dishonesty. The instructor reserves the right to fail the student for the assignment or the course, as well as report the student to the Academic Dean and/or the Dean of Students. They also have the ability to terminate the student's enrollment in the University. The instructor considers this an extremely serious matter. Please make sure you are not in a situation that could be viewed negatively.

I find that a majority of students are honest in doing their schoolwork. However, we must take measures to protect the academic integrity of the classroom. I have a NO TOLERENCE policy for cheating and if you are caught cheating, you will probably fail that portion of the course, as well as possibly the entire course. Cheating in this course is defined as (but not limited to) the following:

- Giving or receiving answers during an exam or quiz.
- Viewing the exam or quiz answers of nearby classmates.
- Having notes/practice work/etc. available during quizzes or tests.
- Possession or access to test items before the test is given.
- Deception in getting an excused absence to obtain the undeserved opportunity to make-up work.
- Use of cell phones or text messaging technology/other devices during exams or quizzes. You
 may not use the calculator on your cell phones.
- Improper citations in written works or using another person's ideas and words as your own without giving proper credit.
- Any method, no matter how well rationalized or accepted, which gives an unfair advantage and/or improves a person's grade by any means other than study and skillful performances on exams and/or other assignments.

Students found guilty of an act of academic dishonesty in this course will be subject to receiving an "F" in this course, as well as the below-mentioned disciplinary actions, as deemed appropriate.

Specific additional disciplinary action for these offenses may include any combination of the following:

Point deduction of an assignment

Failure of an assignment

A grade of zero for an assignment

Failure of this course

Referral to the Academic Integrity Committee or department head for further action Referral to the Dean of the College of Science and Engineering, and other Deans as

appropriate

Referral to the University Discipline Committee

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 reasonable accommodation of their disabilities. If students 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: https://www.tamuc.edu/student-disability-services/

<u>Nondiscrimination Notice</u>: This statement presents the University's commitment to a safe, accepting environment for all students regardless of sexual orientation, gender identification, or gender expression: A&M-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.

<u>Campus Concealed Carry Statement</u>: 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/34SafetyOf <u>EmployeesAndStudents/34.06.02.R1.pdf</u>) 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.

<u>A&M-Commerce Supports Students' Mental Health - Counseling Services</u> The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational 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.

Al Use Policy Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course. Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism). Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors 'guidelines. If no instructions are provided the student should assume that the use of such software is disallowed. In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

13.99.99.R0.10 Graduate Student Academic Dishonesty

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.

COURSE OUTLINE/CALENDAR

Math 1342 Summer II Year 2024 - Topics Covered (tentative schedule):

Week 1 (July 8 – 13)

Syllabus, Introduction and Getting Started. What are Statistics? What are Data? Sampling Strategies and Surveys

Types of Studies (Observational Studies and Experimental Design)

Validity of Studies, and Margin of Error, Exam 1 Review

Week 2 (July 15 - 20)

Exam 1 (July 15) on Monday

Frequency Tables, Graphical Summaries of Data,

Misleading Graphs, Collecting Data and

Numeric Summaries of Data (mean, median, mode, range, intro to "normal")

Creating Box/Whiskers and Stem/Leaf, Variation and Standard Deviation

Week 3 (July 22 - 27)

"Normal" data and Distributions and Standard Deviation

Wrap up "normal" data Exam 2 Review

Exam 2 on Wednesday (July 24)

Intro to Probability

Hands-on Probability (dice, cards, coins, spinners, etc.) Theoretical vs. Empirical Probability – Unions and Intersections, intro to Correlation, & Project/Activity Due

Week 4 (July 29 - August 3)

Correlation and Simple Linear Regression and Line of Best Fit
Sampling Distributions/Sampling Distribution of the Sample Mean
Hypothesis Testing and Calculating Confidence Intervals/Inferences to the Population from the Sample
Review for Exam 3, **Students can take Exam 3 this week if ready**

Week 5 (August 5 – 8)

Exam 3 on Monday (Aug. 5)

Project/Activity due

Review for Final Exam

Final Exam on Thursday (Aug 8), Last class day

<u>Remaining enrolled in this course constitutes acceptance of all policies contained in this syllabus.</u> Any changes to this syllabus will be communicated directly to you in class by the instructor (through email or on D2L). You are responsible for being aware of any such changes.