

# THE UNIV. OF TEXAS AT EL PASO COLLEGE OF SCIENCE MATHEMATICAL SCIENCES DEPT.

## *¡BIENVENIDOS (WELCOME)!*

*note:* From the top of <http://www.math.utep.edu/Faculty/lesser/schedule.html> or our Bb course shell, you can access this syllabus if you misplace yours, want to explore its many links or see any addendums. Syllabus is subject to change by the instructor to meet new mandates or course needs, especially for unexpected changes with respect to class size, technology resources, grading resources, department/UTEP policies, regulations (ADA, FERPA), severe weather or epidemiological conditions, etc. **The yellow highlighted parts are tied to current conditions of the pandemic, which of course may evolve and need clarification or change.**

Course Number: STAT 1380-001 22088

Course Title: Statistical Literacy

Credit Hours: 3

Term: **Spring 2021**

Prerequisite: adequate score on a placement examination or MATH 0311.

(see <http://catalog.utep.edu/search/?P=STAT+1380>)

To be confident you have sufficient math readiness, be sure to try (by end of the first week of classes) the “check your math readiness now!” document in the “starting the course” folder in our Blackboard course shell

Course Fee: none

Course Meetings & Location: **because this is an asynchronous class, material and communications are handled online (e.g., mainly through Blackboard) with no in-person or fixed schedule of meetings; however, there are resources such as posted PowerPoint lecture slides and online office hour time; here is the link to the virtual office hour space in Blackboard Collaborate Ultra:**

**<https://us.bbcollab.com/guest/ceceed02ee3c409489d1b9e3c878dac9>**

Instructor: Dr. Larry Lesser (rhymes with ‘Professor’, spelled like < ).

See background on my homepage <http://www.math.utep.edu/Faculty/lesser/> or hear my introductory rap at <https://www.youtube.com/watch?v=sFizdFK09I8>

Office Location: ~~Bell Hall 213 (by the second floor water fountain)~~ **during this stage of the pandemic, I am generally working somewhere other than my UTEP office and Bell Hall may not even be open to students**

Contact Info:

**Phone:** (915) 747-6845 during this stage of the pandemic, I generally won't be in my UTEP office to be able to answer my UTEP phone, but you can leave a voicemail on this number at any time and I will be able to access the voicemail from wherever I am

**Electronic Communication with Instructor:** to keep things related to our course gathered in one place, I ask that you contact me through the Course Messages option within our Blackboard (Bb) course shell. If for some reason Blackboard is down, you may email me at **Lesser (at) utep.edu**, remembering to: (1) use a meaningful subject line (e.g., don't just type something vague like "stats" or "quiz" or "question"; make sure the subject line includes 1380 and says something specific like "question about STAT 1380 chapter 7 quiz") so that I could do a keyword search and easily find it again a week later after receiving hundreds of new emails after yours, and (2) email from your **miners.utep.edu** address because it provides more security, minimizes the chance the UTEP server rejects it, and because I'm not allowed to discuss confidential information such as grades if you don't). I will generally check for and reply to messages at least once a day, except during holidays. (A daily check is only fair since I'm asking you to do a daily check for possible announcements.) Just so you know, on almost all weekends, I check messages on Sunday, but not on Friday evening or Saturday.

For questions requiring live conversation (whether as a phone call or an online meeting), remember to include several possible times that would work for you so I can reply with which option works in my schedule. If we do a phone call, note that I would be calling from a personal number that will be blocked from showing up on your Caller ID, so you would have to be prepared to accept that call on your phone.

**Homepage:** <http://www.math.utep.edu/Faculty/lesser/>

**Fax:** (915) 747-6502 (note: this is a departmental fax, so be sure to have my name clearly on it and be aware that staff are not available to relay faxes to me outside the hours the math department office is staffed) during the pandemic, the mathematics department is not on a regular in-person schedule, and the department's fax machine is kept in a room I do not have a key to, so do not assume during the pandemic that this will reach me in a timely manner; use email instead of faxing

**Emergency Contact:** (915) 747-5761 (during math dept office hours) during the pandemic, the mathematics department is not on a regular in-person schedule so do not count on it being answered by a live person; you may need to leave a message

### Office hours:

If your question involves technology (e.g., an issue with a browser, connectivity, or Blackboard), contact the UTEP HelpDesk: <https://www.utep.edu/technologysupport/>.

If your question involves basic content, contact the UTEP math tutoring center (MaRCS): <https://www.utep.edu/science/math/marcs/>

or the graduate teaching assistant assigned to help with our course: **Mr. Martin Santos will be handling most of the grading for this course as well as being able for direct help (his initial office hours in our Blackboard Collaborate Ultra room will be Tues, Wed, Fri 3:30-4:30, and he is also reachable at other times by email: msantos4@miners.utep.edu)**

If your question involves course policy, grades, content questions the TA or MaRCS couldn't answer, or big picture questions about your major/career/life, contact the instructor with the Blackboard Course Messages tool. For questions requiring live conversation (whether as a phone call or an online meeting), remember to include several possible times that would work for an appointment so I can reply with which option works in my schedule.

Drop-in (no appointment needed) office hour help in the Blackboard Collaborate Ultra room will be offered by me on Mondays and Wednesdays from 3:33-4:15pm at

**<https://us.bbcollab.com/guest/ceceed02ee3c409489d1b9e3c878dac9>**

When you arrive, be sure to “speak up” or hit the “raise icon” so I’ll know you’re there in case I’m looking away by answering a student email. That link will be the same link used for office hours that our course TA will offer (that will be announced when it is known).

**(if for some reason, an online meeting needs to be held somewhere else such as Zoom, this will be announced)**

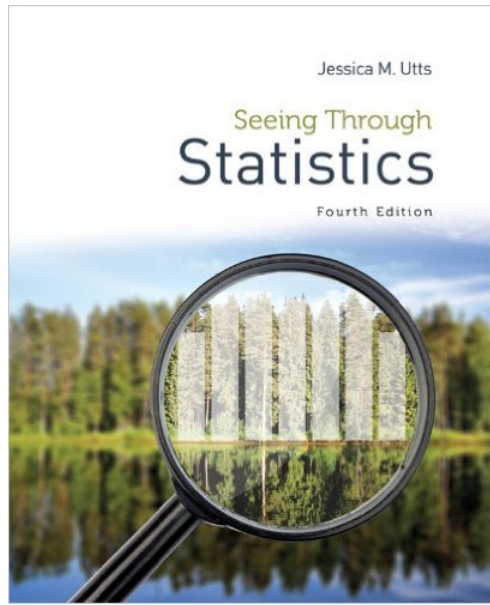
Textbook(s), Materials:

**Required textbook:** *Jessica Utts' Seeing through Statistics (4<sup>th</sup> ed; 2015).*

Cengage Learning. ISBN-13: 978-1285050881 ISBN-10: 1285050886

The specific edition listed (the 4<sup>th</sup> edition; 2015) is required because the exercise numbers, chapter numbers, page numbers, and examples I refer to will all be based on the that edition. However, it does not matter whether you buy or rent, or get the print edition or a digital edition, or whether you and a classmate share a book.

The textbook has a supporting website at: **[http://www.cengage.com/cgi-wadsworth/course\\_products\\_wp.pl?fid=M20b&product\\_isbn\\_issn=1285050886&discipline\\_number=17](http://www.cengage.com/cgi-wadsworth/course_products_wp.pl?fid=M20b&product_isbn_issn=1285050886&discipline_number=17)**



The book should be available from the UTEP Bookstore (let me know if you encounter issues there) or from other places such as Amazon: <http://www.amazon.com/Seeing-Through-Statistics-Jessica-Utts-ebook/dp/B00H7HV92C>

Subject to change based on timing, resources and interest, here's the main material we plan to (un)cover: **chapters 1-11 (in order) then 14**, including supplementary probability material from the handout

[http://www.math.utep.edu/Faculty/lesser/probabilitysupplement\(forUtts\).pdf](http://www.math.utep.edu/Faculty/lesser/probabilitysupplement(forUtts).pdf)

on topics such as simulation, sample space, counting rules, the binomial distribution, and the geometric distribution. There may also be exposure to a few concepts from other chapters as time permits.

#### Required Technology:

**\* calculator (with square root key) on hand before we begin chapter 4:** You'll be allowed to use it on all activities and assessments. You still must be prepared to show enough work so I or the grader can follow your process. Example: to find mean of {3, 4, 5, 5, 8}, don't just say "5", but write out  $(3 + 4 + 5 + 5 + 8) / 5 = 5$ . As long as your calculator can do basic arithmetic such as square roots, that will be fine. A few calculations will be easier with a scientific calculator or graphing calculator (you can use Google to find many resources on how to do statistics with your calculator; I will sometimes demonstrate things with a **TI-83/84** -- their Guidebooks are under the Downloads pulldown menu at the above link). There is also a lab activity handout in Bb that will expose you to how stats are computed with software (e.g., Excel and Minitab). ~~Minitab is in some on-campus labs (e.g., <http://utep.edu/ehs/ile>).~~ Minitab can be accessed anytime anywhere (even in class or at home!) using **UTEP MY.APPS** (see [https://www.utep.edu/technologysupport/ServiceCatalog/INST\\_MyAppsInfo.html](https://www.utep.edu/technologysupport/ServiceCatalog/INST_MyAppsInfo.html)) and its Calc, Stat, Graph pulldown menus have about all you'd need (and more)!

Minitab may be installed at no cost on your personal and UTEP-owned computers! See [https://www.utep.edu/technologysupport/ServiceCatalog/SOFTWARE\\_PAGES/soft\\_minitab.html](https://www.utep.edu/technologysupport/ServiceCatalog/SOFTWARE_PAGES/soft_minitab.html)

(other technology resources you may want to explore on your own include: <http://learn.desmos.com/statistics/>, <https://www.desmos.com>, <http://codap.concord.org>, <https://www.jake4maths.com/grapher/>, <https://www.stat.auckland.ac.nz/~wild/iNZight/index.php>, <https://tuvalabs.com/>;  
also, students can sometimes get free time-limited licenses of software such as <http://fathom.concord.org/> or <https://www.tinkerplots.com/>

## TECHNOLOGY REQUIREMENTS

Course content is delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

You will need to have access to a computer/laptop and be able to scan images if necessary (there is a handout in the Bb course shell of how to do that with your phone). A webcam is sometimes available for checkout from UTEP tech support and is nice to have (so we can see each other during an office hour conversation, for example), but is not required. You should have at least a built-in microphone so that you can talk to me during an online office hour, for example.

Check that your computer hardware and software are up-to-date and able to access all parts of the course. The Technology Support Center has laptops and hotspots available to students to borrow for the whole semester. The application form is found at: [https://www.utep.edu/technologysupport/TSCenter/tsc\\_eqcheckout.html](https://www.utep.edu/technologysupport/TSCenter/tsc_eqcheckout.html)

You may need to download or update the following software: Microsoft Office, Adobe Acrobat Reader, Windows Media Player, QuickTime, and Java. If you do not have word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP's **Microsoft Office 365** Portal.

**IMPORTANT:** If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP **Help Desk** as they are trained specifically in assisting with technological needs of students. Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!

[Course Communication: How we will stay in contact with each other](#)

Because this is an asynchronous online class, we won't see each other in the ways you may be accustomed to, but there are a number of ways we can keep the communication channels open:

**Office Hours:** We will not be able to meet on campus, but scheduled office hours will be available for your questions and comments about the course. Those office hours (mentioned earlier) are held on Blackboard Collaborate Ultra using this link:

<https://us.bbcollab.com/guest/ceceed02ee3c409489d1b9e3c878dac9>

(if a meeting needs to be somewhere else such as Zoom, this will be announced)

- **Technology help:** contact the UTEP HelpDesk at <https://www.utep.edu/technologysupport/>.
- **Discussion Board:** You will usually have weekly opportunities to interact on the Discussion Board Forums. You are encouraged to respond to other students' posts if you have a helpful, constructive response.
- **Basic content help:** contact the UTEP math tutoring center (MaRCS) at <https://www.utep.edu/science/math/marcs/> or the graduate student grader assigned to help with our course
- **Help from the instructor:** If your question involves course policy, grades, content questions the TA or MaRCS couldn't answer, or big picture questions about your major/career/life, contact the instructor by using the Course Messages tool in Blackboard.
- **Announcements:** Check the Blackboard announcements each day for any updates, deadlines, or other important messages. (Another option is that by checking your official email each day, you will find out if there is a Blackboard Announcement, but by logging into Blackboard you will also be able to see any activity in the Discussion Boards, Course Messages, etc.) If I get a message like "oh, I just saw the announcement from 5 days ago about the assignment that was due yesterday – can I turn it in late?", the answer will be no.

**Course Objectives** (learning outcomes based on domain-specific educational objectives specified by the Texas Higher Education Coordinating Board for courses in the University Core Curriculum):

Students will be able to....

**apply arithmetic, algebraic, geometric, higher-order thinking, and statistical methods to modeling and solving real-world situations.**

Numerical and graphical summaries of one-variable and two-variable datasets are interpreted, produced, and described verbally. We assess the reasonableness of linear models to data sets. We assess the reasonableness of a study's conclusions based on that study's qualities (e.g., was randomization used?).

**represent & evaluate basic mathematical information verbally/numerically/graphically/symbolically**

Numerical and graphical summaries of one-variable and two-variable datasets are interpreted, produced, and described verbally.

**expand mathematical reasoning skills & formal logic to develop convincing mathematical arguments.**

Reasoning used to apply probability rules and to critique statistical studies (and to assess whether a claim of significance is warranted).

**use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results.**

technology incorporated such as spreadsheet software, internet applets/simulations, or graphing calculators.

**interpret mathematical models (formulas/graphs/tables/schematics) and draw inferences from them.**

Histograms, scatterplots, boxplots, tables, regression lines, etc. are interpreted.

**recognize the limitations of mathematical and statistical models.**

Studies done without random selection and/or random assignment are recognized as limited. Pitfalls and limitations of experiments (e.g., ecological validity), observational studies (e.g., no random assignment), and surveys are discussed. Formulas such as margin of error are recognized not to apply for a volunteer sample, for example.

**develop the view that mathematics is an evolving discipline, interrelated with human culture, and understand its connections to other disciplines.**

Because statistics can be applied to data from virtually all disciplines, it is natural to make clear interdisciplinary connections. Statistics and its tools are much newer field than the mathematics in "other math core classes". The connection to human culture comes into play with the human judgments that go into writing "the best" survey question, or deciding how to handle an outlier value, etc.

This course will expose you to typical intro topics but with particular emphasis on and grounding in conceptual understanding and statistical literacy in real life. You deserve, need and will be offered more than a plug-and-chug, memorize-the-recipes experience! You'll be able to critically evaluate statistics commonly found in the media and in your major field. You'll become acquainted with what is involved in the collection, interpretation, and communication of real-world data to explore questions of interest.

Also, **future teachers** will have the chance to gain background to handle probability and statistics questions on the TExES/ExCET (<http://cms.texas-ets.org/prepmaterials/>), teach related TEKS (<http://ritter.tea.state.tx.us/rules/tac/chapter111/index.html>), and make appropriate connections to the NCTM Standards (<https://www.nctm.org/Standards-and-Positions/Principles-and-Standards/>), the GAISE PreK-12 Curriculum Framework (<http://www.amstat.org/Education/gaise/>), and the Common Core State Standards [http://www.corestandards.org/assets/CCSSI\\_Math%20Standards.pdf](http://www.corestandards.org/assets/CCSSI_Math%20Standards.pdf). Your instructor has even taught some statistics on a children's educational TV show to local first and second graders: <https://youtu.be/iVeCN6dTvzo>). Also, see <http://www.amstat.org/ASA/Education/K-12-Educators.aspx#classroom?hkey=09d2addb-f9d1-42a8-bb71-3f395265b531>

**Course Activities/Assignments:** Students will participate in a variety of activities and assessments, informed by factors such as available technology and grading resources.

**Assessment of Course Objectives:** Assessments include quizzes, exams, and a project.

**Course Schedule:**

UTEP Census Day: **Wed. Feb. 3 (not to be confused with our nation's 2020 Census whose counting ended last semester and results should be tabulated, verified, and disseminated this semester! see <https://2020census.gov/>); this is also the deadline to sign up for a team group (after that, I will put you in a group)**

**Data Analysis Project Proposal** in MS Word due via Blackboard by **6pm Monday, Feb. 22**; use the file <http://www.math.utep.edu/Faculty/lesser/1380proposal.docx> and keep it in Word when your team uploads it to me via Group Assignments in our course shell (see Groups link or see Team Project folder)

Midterm Exam: **(may be done in multiple sittings within 9am March 8 – March 10 9am)**

Midterm grades: submitted by instructor to registrar by **March 21**

Deadline to Drop with a “W”: **Thursday April 1** (College of Science won’t approve drop requests after this except for withdrawal of all courses)

Team Project Writeups due via Blackboard Assignments: **9am Sunday, April 25**

End-of-Course Evaluations by students during expected window of **April 26 – May 9**

Finals-week exam: **9am Mon. May 10 -- 9am Wed. May 12**, focusing on material

**AFTER** the material covered by the midterm)

In the Blackboard course shell is a document that has full detail of the weekly modules, (which are subject to modification by instructor if necessary), but for your convenience a summarized version is below. Notice that most deadlines are Sundays at 9am, but “The technology was down” or “the HelpDesk was closed” won’t be accepted as an excuse between Friday 5pm and Sunday 9am. So this gives you the incentive to try at least the “hardest parts” before 5pm Friday, before help may become less available, and also gives you some breathing room if you have the technology under control but you had unexpected interruptions and just need another day to finish writing things up.

(D = Discussion Board post; Q = quiz)

<b>Module #: chapter topic(s)</b>	<b>Deadline</b>	<b>Assessments included</b>
1: overview	Sun., Jan. 24, 9am	D, D, Q
2: stats in the news	Sun., Jan. 31, 9am	D, Q
3: measurements	Sun., Feb. 7, 9am	D, Q
4: sampling	Sun., Feb. 14, 9am	D, Q, Q
5: experiments and observational studies	Sun., Feb. 21, 9am	D, Q
Team Project Proposals	Mon., Feb. 22, 6pm	
6: summarizing measurement data	Sun., Feb. 28, 9am	D, Q
Midterm exam window	Mon., March 8, 9am – Wed., March 10, 9am	
7: normal curves	Sun., March 14, 9am	D, Q
8: graphs	Sun., March 28, 9am	D, Q
Art of Statistics (extra-credit) due	Thurs., April 1, 9am	
9: correlation and regression	Sun., April 4, 9am	D, Q
10: correlation caveats	Sun., April 11, 9am	D
11: probability	Sun., April 18, 9am	D, Q, Q
Team Project Writeups due	Sun., April 25, 9am	
Team Project videos due	Sun., May 2, 9am	
End-of-course evals due	Sun., May 9	
Finals-week exam window	Mon., May 10 9am- Wed., May 12 9am	



**Grading Policy:** after any rescaling needed for all components to be on the same 0-100 scale, the letter grade is determined by the usual cutoffs of 90-80-70-60 based on these:  
\* **Exams** (a Midterm (20%) and a finals-week exam (20%)): you are allowed a calculator and your book; the main emphasis of the exam is not on memorization or rote procedures, but on being able to recognize, apply, critique, and interpret concepts in context (e.g., in newspaper articles or graphs); it is recommended that you study with a partner your class notes, the textbook chapters (pay extra attention to the parts in boxes or boldface!), PowerPoint slides, quizzes, etc.; format is expected to be about 50 multiple-choice questions; details of what you should be prepared to do are on a “stuff to know for exams” handout in the Content Resources folder of our Blackboard course shell; the finals-week exam is not cumulative -- it focuses on material AFTER material covered by the midterm

\* **Quizzes** (20%): The exact nature, number, and weighting of quizzes (which can vary in format, including homework exercises, reflection essays, etc.) are subject to change after the quality and quantity of available grading resources are known and what makes the most practical sense for the complex constraints and parameters of Blackboard, FERPA, and ADA; these assignments will be submitted in Blackboard; not all types of tasks will automatically be assessed or assessed in the same manner; some of these will be “dropped” (see section on Makeup Policy)

\* **Participation** (5%): This is based on doing whatever Discussion Board posting is assigned each week by each week’s deadline. To get credit, the post needs to be a sincere, constructive, thoughtful, specific post relevant to the question – you can’t just post “statistics rocks!” or “I agree!” and get credit.

\* **Team Project** (35%) – for deadlines, see Course Schedule above; for requirements, see <http://www.math.utep.edu/Faculty/lessner/Stat1380DataProject.pdf>; the 35% is broken into a team grade for 30% and an individual grade (based on peer-ratings submitted during the finals-week exam) grade for 5%

\* the only **Extra Credit** opportunities expected to be offered are:

---up to 3 points on finals-week exam by turning in via Bb Course Messages (by **Thurs., April 1, 9am**) a statistics-related original poem, song, or video; see

<http://www.math.utep.edu/Faculty/lessner/ARTofSTATISTICSAug2020.docx>

---up to 6 points added to all final exam scores based on class response rate on end-of-course evaluations (95% = 6 pts, 90% = 5, 85% = 4, 80% = 3, 75% = 2, 70% = 1), assuming UTEP keeps allowing this reward and lets me access the rate in a timely manner

--up to 4 points added to the Team Project by uploading a video presentation in Blackboard by **May 2, 9am** (see details in

<http://www.math.utep.edu/Faculty/lessner/Stat1380DataProject.pdf>)

### Makeup Policy:

Because **exams** are given online during a multi-day window and are designed to be done in about the same total time as a regular class period, it should be extremely rare for a student to need to take a makeup exam. For a makeup exam to be possible, you must take the initiative to send me a Course Message, or voicemail (747-6845) within 24 hours (or the earliest medically possible opportunity) that tells me: (1) why missing the scheduled class exam window was

unavoidable or unforeseen (even if it takes another few days to relay to me written documentation such as a letter from a employer/athletic/military supervisor, doctor's note, jury summons, etc.), and (2) specifically states the soonest you are able to take a makeup exam. Also, out of considerations of fairness and logistics, if the **team project** is turned in late without solid justification, there will be a significant grade penalty (commensurate with how late it is) if it is accepted at all.

With missed deadlines for each week's individual "little things" (e.g., a quiz or discussion board post -- there are literally over a thousand of these items across all my students!), I am building in a no-fault cushion for **quizzes**. **Only the top 7 quiz scores will count** (out of at least 12 opportunities). In other words, I am intentionally and generously building in a "life happens" cushion of at least 5 times when you can miss the deadline for a quiz without a documented compelling reason relayed in a timely manner and not get a zero that counts. (For example, if your 12 ten-point quiz scores are seven 10's and five 0's, then your quiz average is still a perfect 100%!).

While the system covers people who miss just a few quizzes, if you have a major situation (e.g., an extended illness or military deployment) that could impact many quizzes, let me know in a timely manner (in advance, if possible, but no later than 24 hours after a deadline) and I am happy to work something out with you that is supportive and fair, especially if you have some kind of documentation (such as doctor's note, jury summons, a note from an employer/athletic/military supervisor, etc.).

#### ALTERNATIVE WAY TO SUBMIT WORK IN CASE OF TECHNICAL ISSUES

"The technology was down" or "the HelpDesk was closed" won't be accepted as an excuse between Friday 5pm and Sunday 9am. So this gives you the incentive to try at least the "hardest parts" before 5pm Friday, before help may become less available, and also gives you some breathing room if you have the technology under control but you had unexpected interruptions and just need another day to finish writing things up. In other words, get in the habit of thinking of each assignment as due on Friday afternoon, with a grace period of a little more than another day if you really need it.

If you are experiencing difficulties submitting your work through the course website, please contact the UTEP Help Desk. Remember there is a document in our course shell (see Technology Resources folder) describing how to use your phone to take a picture of work and upload it as a PDF file.

Save all your work (answers to discussion points, quizzes, exams, and essays) in a separate Word document as a backup. This way, you will have evidence that you completed the work and will not lose credit and as a last resort, you can send me or the grader (via Course Messages or email) your backup document.

#### POLICY ON AN INCOMPLETE GRADE FOR THE COURSE

Incomplete grades may be requested only in exceptional circumstances after you have completed at least half of the course requirements. Talk to me immediately if you believe an incomplete is warranted. If granted, we will establish a contract of work to be completed with deadlines.

**Drop Policy:** According to UTEP Curriculum and Classroom Policies, “When, in the judgment of the instructor, a student has been absent to such a degree as to impair his or her status relative to credit for the course, the instructor may drop the student from the class with a grade of “W” before the course drop deadline and with a grade of “F” after the course drop deadline.” While I would have the right to do this, I am letting you know that I choose not to be the one to drop you from the course – you will instead need to contact the Registrar’s Office yourself to initiate the process by the deadline to make sure you won’t be at risk of receiving a failing grade. The reason for my policy is because I have found that the very cause of an extended absence is what may also prevent you from being in touch to discuss it with me in a timely manner, and I have also had some students actually prefer a likely F to dropping the course due to a particular requirements of their financial aid or military service agreement. **And, of course, it is less clear what “absent” means in an asynchronous online course, beyond something simple as number of days between logins.**

**Academic Integrity Policy:** It’s UTEP’s policy (and mine) for all suspected violations to be referred to the Office of Student Conduct and Conflict Resolution (OSCCR) <https://www.utep.edu/student-affairs/osccr/> for investigation and disposition (see the Handbook of Operating Procedures, <https://www.utep.edu/vpba/hoop/>). Cheating, plagiarism and collusion in dishonest activities are serious acts which erode the university’s purpose and integrity and cheapen the learning experience for us all. Don’t resubmit work completed for other classes without specific acknowledgment and permission from me. It is expected that work you submit represents your own effort (or your own group’s effort, if it is a group project), will not involve copying from or accessing unauthorized resources or people (e.g., from a previous year’s class). You must cite references that you do consult, using **APA style** with complete citations even for websites and people you consult.

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. **Cheating** may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. **Plagiarism** occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. (Some of your coursework and assessments may submitted to a plagiarism-detecting software such as SafeAssign. SafeAssign is used review assignment submissions for originality and will help you learn how to properly attribute sources rather than paraphrase.) **Collusion** involves collaborating with another person to commit any academically dishonest act.

**For Group Work:** Within a group, members are allowed to divide up subsets of the project for which individuals will take the initial responsibility for coordinating efforts, but it is expected that by the time a group turns in a writeup that all members have read, discussed, contributed to, and understand what is being turned in. Group members may even discuss general ideas and strategies with members of other groups, but NOT share parts of actual written work. At a

minimum, to be safe, put away all written notes and writing materials and recording devices before having any intergroup conversations. And if you still see a “gray area,” play it safe and ask the instructor!

**Civility Statement:** We should all strive to follow basic standards of courtesy. Our comments in discussion forums should focus constructively and respectfully on the intellectual merit of a position, *not* critiquing the person expressing it. Finally, know that free speech has limits and that the *UTEP Handbook of Operating Procedures* prohibits communication that is harassing, disruptive, or that incites imminent violations of law. Violations may be referred to the Office of Student Conduct and Conflict Resolution or Campus Police.

## NETIQUETTE

Googling netiquette reveals that many universities have such guidelines such as UTEP: <https://www.utep.edu/extendeduniversity/utepconnect/blog/october-2017/10-rules-of-netiquette-for-students.html>

As we know, sometimes communication online can be challenging. It’s possible to miscommunicate what we mean or to misunderstand what our classmates mean given the lack of body language and immediate feedback. Therefore, please keep these **netiquette** (network etiquette) guidelines in mind. Violations may result in disciplinary action.

- Always consider your audience. This is a college-level course; therefore, all communication should reflect polite consideration of other’s ideas.
- Respect and courtesy must be provided to classmates and to the instructor. You can critique someone’s statement while respecting, not attacking, the person who made the statement. No harassment or inappropriate (e.g., profane, hateful, racist, sexist, etc.) postings will be tolerated and sustained/deliberate violations will be referred to the Office of Student Conduct and Conflict Resolution (OSCCR) if necessary.
- When reacting to someone else’s message, address the ideas, not the person. Post only what anyone would comfortably state in a face-to-face situation.
- Blackboard is not a public internet venue; all postings to it should be considered confidential. Whatever is posted on in these online spaces is intended for classmates and professor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space.

**Student Accommodations Statement:** The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act

Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University.

If you have or believe you have a disability requiring accommodations, you may wish to self-identify by contacting the Center for Accommodations and Support Services (CASS; 747-5148; East Union Building 106; [cass@utep.edu](mailto:cass@utep.edu); <https://www.utep.edu/student-affairs/cass/>) to show documentation or register for testing and services. CASS will ask you to discuss needed accommodations with me within the first 2 weeks of the semester or as soon as disability is known, and at least 5 working days before an exam. Be aware that CASS does not allow accommodations to be offered retroactively, so, for example, if you believe you qualify for an accommodation for extra time on an exam or assignments, you should make sure you contact CASS with enough time before that exam/assignment, not afterwards. At the start of a term, CASS sometimes has had processing delays, and you are responsible to contact (and follow up with) CASS promptly so that I receive the CASS accommodation letter as soon as possible. CASS provides note taking, sign language, interpreter, reader and/or scribe services, priority registration, adaptive technology, diagnostic testing for learning disabilities, assistance with learning strategies/tutoring, alternative testing location and format, and advocacy. Depending on the specifics of your accommodations, I may need to email you to set up a live conversation with you about the best approach, so please be responsive. In summer 2020, CASS launched the online portal AIM (Accessible Information Management) at <https://www.utep.edu/student-affairs/cass/> that allows students to access or request services online 24/7.

**Military Statement:** Give me an email or written documentation as soon as possible if you anticipate the possibility of missing large parts of class due to military service.

## **COVID-19 PRECAUTIONS**

You must STAY AT HOME and REPORT if you (1) have been diagnosed with COVID-19, (2) are experiencing COVID-19 symptoms, or (3) have had recent contact with a person who has received a positive coronavirus test. Reports should be made at [screening.utep.edu](https://screening.utep.edu). If you know of anyone who should report any of these three criteria, you should encourage them to report. If the individual cannot report, you can report on their behalf by sending an email to [COVIDaction@utep.edu](mailto:COVIDaction@utep.edu).

For each day that you attend campus—for any reason—you must complete the questions on the UTEP screening website ([screening.utep.edu](https://screening.utep.edu)) prior to arriving on campus. The website will verify if you are permitted to come to campus. Under no circumstances should anyone come to class when feeling ill or exhibiting any of the known COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, and alternative instruction will be provided. Students are advised to minimize the number of encounters with others to avoid infection.

Wear face coverings over your nose and mouth when in common areas of campus or when others are present. If you choose not to wear a face covering, you may not enter a UTEP building. If you remove your face covering, you will be asked to put it on or leave the classroom. Students who refuse to wear a face covering and follow preventive COVID-19 guidelines will be dismissed from the class and be subject to disciplinary

action according to Section 1.2.3 *Health and Safety* and Section 1.2.2.5 *Disruptions* in the UTEP Handbook of Operating Procedures.

**Catalog Description** (slightly-updated in mid-2020!): Statistical Literacy: Emphasis will be on standard descriptive measures of location, variability, and association. Includes regression, probability and sampling, and the normal distribution. Interpretation of data which occur in daily life (e.g., polls, weather forecasts, medical studies, etc.).

**Professionalism Statement:** Beyond the previously-mentioned Civility Statement, students in this course are expected to exhibit professionalism that goes beyond avoiding negative behaviors. This includes making a good faith effort in preparation for and participation in individual and collaborative class activities. This also includes supporting a classroom culture respecting “incorrect answers” as usually correct answers to a different question or valuable opportunities to address an important distinction or common misconception. (*Fun Fact:* “mistakes” led to inventing sticky notes, penicillin, and rubber tires!) Also, be open to local opportunities for professional growth or service. For example, future teachers may consider encouraging K-12 students to enter an **ASA Project or Poster** (due April 1) or joining (at cheaper student rates!) professional organizations -- local (GEPCTM), state (**TCTM**), or national (**NCTM, TODOS**, etc.). You can also get a taste of student research by attending (and one day presenting at) events on campus such as the COURI symposium or Graduate Student EXPO and the strongest student project authors in our class might consider entering a national contest: <https://www.causeweb.org/usproc/usclap/>.

**Confidentiality:** UTEP policy requires that inquiries about confidential information such as grades cannot be done over the telephone, but can be from your miners.utep.edu account or within Blackboard Course Messages and accompanied by your 800 number. If the question happens during an office hour where others are present, the instructor can bring you into a private virtual “breakout room” where no one else can hear. Grade information will be posted in our Bb course shell.

This class is asynchronous, which means that it will not have regularly scheduled virtual meetings as a major way to deliver content. However, if we end up having an optional occasional meeting, be aware that any recording of it is governed by the Federal Educational Rights and Privacy Act (FERPA) and UTEP’s acceptable-use policy. A recording of class sessions will be kept and stored by UTEP, in accordance with FERPA and UTEP policies. Your instructor will not share the recordings of your class activities outside of course participants, which include your fellow students, teaching assistants, or graduate assistants, and any guest faculty or community-based learning partners with whom we may engage during a class session. **You may not share recordings outside of this course.** Doing so may result in disciplinary action.

## Copyright Statement for Course Materials

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

**Acknowledgment on ELL and Equity Awareness:** Development of this class was supported in part by the US DOE grant **Project LEAP-UP**. Many of you are/were ELLs or will soon teach them. I will model strategies that help ELLs (and others, too!) and incorporate awareness of ELL issues and resources in probability/statistics (e.g., **my 2011 paper in Statistics Teacher Network**, resources at <http://www.tsusmell.org/>, and <http://isi.cbs.nl/glossary/index.htm>). The **English Language Proficiency Standards** require language acquisition and academic success in all content areas for students at all 4 levels (beg., int., adv., adv. high) in all 4 domains (listening, speaking, reading, writing). Finally, consider that the grade level readability of *any* subject's text is from a *statistical* model based on average number of syllables per word, average number of words per sentence, etc. (e.g., see "readability" in MSWord Help).

Development of this class was also supported in part by US DoE grant Project ACE (ACtion for Equity) and some statistics examples we discuss involve or apply to equity, such as gender equity. Check out the cool poster at <http://www.cdc.gov/nchs/about/poster.htm> and some resources at <http://www.math.utep.edu/Faculty/lesser/equity.html>

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**Other Resources:** For those who may be helped by consulting statistics books for additional mathematical theory, conceptual intuition, or real-world connections, go to the UTEP library circulation desk and ask them to look under "STAT 1380"). Also, know that there are free statistics textbooks online (e.g., <https://openstaxcollege.org/textbooks/introductory-statistics/get> or <http://onlinestatbook.com/>) that can be consulted as references as well. I compiled <http://www.math.utep.edu/Faculty/lesser/StatEdIntro.html> to share applets and other resources that not only can help your own understanding in this course, but also offer further context and connections with some topics. Please let me know of other resources you find helpful that I may not know about.

Calculation pages: <http://statpages.org/> (includes much beyond our course)

Classroom connections (interesting for all, especially future teachers):

<http://ww2.amstat.org/education/stn/> (e.g., browse issue #64)

<http://www.statisticteacher.org/>

<https://www.causeweb.org/cause/resources/>

<https://www.census.gov/schools/>

<http://www.amstat.org/asa/education/K-12-Statistics-Education-Webinars.aspx>

<https://onlinelibrary.wiley.com/journal/14679639> (UTEP students have access through the UTEP library webpage)

UTEP Library: Also, I've put some statistics books with other conceptual intuition or real-world connections on reserve at the circulation desk under "Lesser" or "Stat 1380." On the 2nd floor, free walk-in tutoring is available for this course (<http://marcs.utep.edu>; Library 218; 747-5366)

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as well as [free help with writing papers](http://www.utep.edu/writing) (Library 227; 747-5112; Writing Center (Library 227, 747-5112, <http://uwc.utep.edu/>).

General study tips: <http://www.math.utep.edu/Faculty/lesser/mathtips.html>

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campus carry: <https://www.utep.edu/campuscarry/>

campus safety: <https://www.utep.edu/police/UTEP-Emergency-Action-Guide.pdf>

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**Student Support:** While my training is limited to academic resources (e.g., my chapter on statistics anxiety on (e)reserve in the UTEP library under “MATH 5364”), but I want anyone who feels overwhelming stress/crisis/need to know about these broader resources:

**TECHNOLOGY:** lots of great resources for learning from home, including equipment checkout, mobile hotspots, smartphone use, OneDrive, Minitab statistics software, Microsoft Office (including Excel and PowerPoint), VPN (to access Library materials) are at: <https://www.utep.edu/technologysupport/learningremotely.html>;  
UTEP HelpDesk continues to offer you technical support at <https://www.utep.edu/technologysupport/>; you can test your Internet connection from your location by going to <https://fast.com/> and make sure your upload and download speeds are at least 1-2 Mbps; UTEP is keeping open the Library’s 2<sup>nd</sup> floor computer lab, reconfigured with protocols for cleaning and social distancing:

[https://libguides.utep.edu/service\\_updates](https://libguides.utep.edu/service_updates)

[https://www.utep.edu/advising/student\\_resources/student-success-helpdesk.html](https://www.utep.edu/advising/student_resources/student-success-helpdesk.html)

**FINANCES:** If you need assistance with tuition, books, technology, or even food and housing, there are many resources available at: <https://www.utep.edu/utepcares/> ;  
<https://www.utep.edu/student-affairs/dean-of-students-office/emergencyaid/>;  
<https://pickaproject.utep.edu/project/20528> (yes, I donated to this);  
[https://www.utep.edu/advising/student\\_resources/student-success-helpdesk.html](https://www.utep.edu/advising/student_resources/student-success-helpdesk.html)

**HEALTH:** UTEP counseling center <https://www.utep.edu/student-affairs/counsel/>;  
Student Health and Wellness Center <https://www.utep.edu/chs/shc/>;

El Paso coronavirus hotline 212-6843

[https://www.epcovid19.org/?utm\\_term=0\\_e40960450f-2b5e66a1bf-588156489](https://www.epcovid19.org/?utm_term=0_e40960450f-2b5e66a1bf-588156489)

El Paso’s 24-hour Mental Health Crisis Line: 779-1800;

National Suicide Prevention Hotline or Veterans Crisis Line: 1-800-273-8255;

NAMI (National Alliance Against Mental Illness) of El Paso: 534-5478

<https://emergency.cdc.gov/coping/selfcare.asp>

<https://www.cdc.gov/mentalhealth/tools-resources/individuals/index.htm>