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. Also, thank you for understanding that the yellow highlighted parts are subject to clarification or change due to the instructor Innot having access to full information in time for syllabi to be submitted

Course Number: STAT 1380 (1380-001 is 11302; 1380-003 is 11303; 1380-005 is 11304)
Course Title: Statistical Literacy
Credit Hours: 3
Term: Fall 2020
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 "Math Readiness Assessment" (of examples of specific math skills you will need during the course) posted in our Bb course shell in the folder of first-week stuff
Course Fee: none

Course Meetings & Location: because this is an asynchronous class, material and comunications are handled mainly through Blackboard with no in-person meetings; and while there is no fixed schedule of online class meetings to present material, office hour time online (e.g., Blackboard Collaborate Ultra) will be available to answer your questions: **https://us.bbcollab.com/guest/db45bc4318ac4c63aaa5ae612986914**

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=sFizdFK09l8**

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: because of the technology conditions and the large number of students I am teaching this semester, 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** (but please use a meaningful subject line and include **1380** so it is easy to see and search for; also, be sure you are emailing me 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 answer questions about confidential matters such as grades if you don't)

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, contact the UTEP HelpDesk: **https://www.utep.edu/technologysupport/**.

If your question involves basic content, contact the UTEP math tutoring center: **https://www.utep.edu/science/math/marcs/**
or the graduate student grader assigned to help with our course, starting Sept. 8:
Mr. Martin Santos, who will hold office hours in Blackboard Collaborate Ultra on Tuesdays from 1:30-3:30 and on Fridays from 1-2, and he can also be reached 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 by using the Course Messages tool in Blackboard, choosing the appropriate Forum and including a meaningful subject line so that I know right away which section you are in (I teach more than one section of this class) and what type of question you have. This method also helps provide security (in case grades are discussed) and helps me quickly find the message later when necessary instead of scrolling through my UTEP webmail Inbox that

already has many thousands of messages! But if for some reason Blackboard is down, you can contact me by email: Lesser (at) utep.edu. 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 most weekends, I check messages on Sunday, but not on Friday evening or Saturday. For questions requiring live conversation (whether as a phone call or a Blackboard Collaborate Ultra meeting online), send me several possible times that would work for an appointment and I will reply with which option works in my schedule.

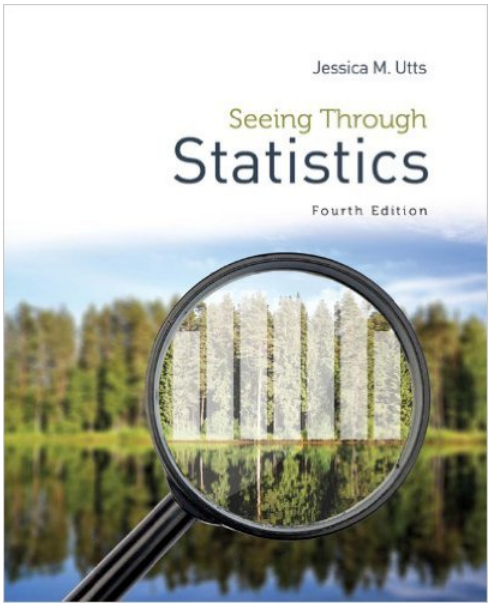
Based on the first-week survey you did in Blackboard, drop-in (no appointment needed) office hour help in the Blackboard Collaborate Ultra room will be usually be offered by me at 10am on Mondays and Fridays at
https://us.bbcollab.com/guest/db45bc4318ac4c63aaa5ae612986914
When you arrive, be sure to "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 is the same link for office hours offered by our course TA.

Textbook(s), Materials:

Required textbook: Jessica Utts' *Seeing through Statistics* (4th ed; 2015).
Cengage Learning. ISBN-13: 978-1285050881 ISBN-10: 1285050886

It will be much more clear and helpful for you to have the specific edition listed (the 4th edition; 2015) because the exercise numbers, page numbers, and examples I refer to will all be based on the 4th edition. However, it does not matter whether you buy or rent, or get the print edition or a digital edition.

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**



A way to get the book: 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** 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/chs/ilc**). 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**) and its Calc, Stat, Graph pulldown menus have about all you'd need (and more)!
Minitab may be installed on your personal and UTEP-owned computers! Follow the instructions at **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**

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 will be held on Blackboard Collaborate Ultra using this link: **https://us.bbcollab.com/guest/db45bc4318ac4c63aaa5ae612986914**; the hours I or the TA will be holding were mentioned earlier in the syllabus.
- **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 Boards. If you have a question or comment that you believe other students may also be interested in, please post it in the "Hivemind HELP" Forum inside of Blackboard. Please respond to other students' questions if you have a helpful response (that doesn't simply give away an answer to a graded assignment, of course).
- **Basic content help:** contact the UTEP math tutoring center 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, choosing the appropriate Forum and including a meaningful subject line so that I know right away which section you are in (I teach more than one section of this class) and what type of question you have. This method also helps provide security (in case grades are discussed) and helps me quickly find the message later when necessary instead of scrolling through my UTEP webmail Inbox that already has many thousands of messages! But if for some reason Blackboard is down, you can contact me by email: Lesser (at) utep.edu. In the body of your e-mail, clearly state your question. At the end of your e-mail, be sure to put your first and last name, and your university identification number.

  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 most weekends, I check messages on Sunday, but not on Friday evening or Saturday. For questions requiring live conversation (whether as a phone call or a Blackboard Collaborate Ultra meeting online), send me several possible times that would work for an appointment and I will reply with which option works in my schedule. If we do a telephone call, note that I would be calling from a personal number that will be blocked from showing up on Caller ID, so you would have to be prepared to accept that call on your phone.
- **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 check on activity in the Discussion Boards, Course Messages, etc.)

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.texes-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**. 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 assessments (such as quizzes or written reflections), exams, and a final project.

Course Schedule:
UTEP Census Day: Wed. Sept. 9 (not to be confused with our nation's 2020 Census which must be done by Sept. 30: 844-330-2020 or https://my2020census.gov/)
Turn in **Data Analysis Project Proposal** in MS Word by 5pm Sept. 28; u**se** 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 (within your Group) in our course shell so that we can readily edit it if needed

Midterm Exam: the week of October 12 (the exact window will be a couple of days long; currently set for 5pm Oct. 11 – 5pm Oct. 13)

Midterm grades submitted by instructor to registrar by Oct. 22

Deadline to Drop with a "W": Fri., Oct. 30 (College of Science won't approve drop requests after this except for withdrawal of all courses)

Project Writeups due in Blackboard: Mon., Nov. 23

Finals-week exam: the week of Dec. 7 (the exact window will be a couple of days long; currently set for noon Dec. 7 – noon Dec. 9; focusing on material AFTER the material covered by the midterm)

In the Blackboard course shell is a document (with the most recent modules listed first) that has the weekly tasks for you to do, with these dates (subject to modification by instructor if necessary). Keep in mind that for regular Friday afternoon due dates (not the things in red), there is a "grace period" where you can turn it in by 11:59pm Sunday without a penalty, but you don't want to rely on that in because help may be less available during the grace period if you run into problems.

Module 1 (focuses on chapter 1): due 5pm Aug. 28
Module 2 (focuses on chapter 2): due 5pm Sept. 4
Module 3 (focuses on chapter 3): due 5pm Sept. 11
Module 4 (focuses on chapter 4): due 5pm Sept. 18
Module 5 (focuses on chapter 5&6): due 5pm Sept. 25
Data Analysis Project Proposal due (one per team, submitted in MS Word through Group Assignments): 5pm Sept. 28
Module 6 (focuses on chapter 7): due 5pm Oct. 2
Module 7 (focuses on chapter 8): due 5pm Oct. 9
Midterm Exam (described below): available between 5pm Oct. 11 - 5pm Oct. 13
Module 8 (focuses on chapter 9): due 5pm Oct. 16
Module 9 (focuses on chapter 10): due 5pm Oct. 23
Module 10 (focuses on chapter 11): due 5pm Oct. 30
Module 11 (focuses on chapter 14): due 5pm Nov. 13
(note: there is a possibility of one more module added to the last part of the schedule with plenty of advance notice, and this would be informed by pace of the course, progress on projects, and current events)
Project Writeups due (one per team, submitted through Group Assignments in Blackboard: Mon., Nov. 23)
Project Presentations (for those teams doing them): Nov. 23 – 3pm Dec. 4
Finals-week exam (described below): available between noon Dec. 7 – noon Dec. 9

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:

* Midterm (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), even if the questions have a multiple-choice format; it is recommended that you study with a partner your class notes, the textbook chapters, homework, and quizzes; format is expected to be about 50 multiple-choice questions; details of what you should be prepared to do are on a handout in our Blackboard course shell
* Finals-week exam (20%) – it's not a cumulative final – it's just another exam and it focuses on material AFTER material covered by the midterm; format is expected to be about 50 multiple-choice questions; details of what you should be prepared to do are on a handout in our Blackboard course shell
* Weekly Module tasks (20%): The exact nature, number, and weighting of quizzes, homework, and short reflection essays will be announced later after it is known what grading resources are available 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 thoughtful post relevant to the question – you can't just login and post "statistics rocks!" and get credit.
* Team Project (35%) – for deadlines, see Course Schedule above; for requirements, see **http://www.math.utep.edu/Faculty/lesser/Stat1380DataProject.pdf**
* the only Extra Credit opportunities:
---up to 3 points on finals-week exam by turning in to me via Bb Course Messages (by 5pm, Nov. 23):
http://www.math.utep.edu/Faculty/lesser/ARTofSTATISTICSAug2020.docx
---up to 6 points added to all finals-week 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 continues to allow this reward and shows the rate in a timely manner

Makeup Policy:

Because **exams** are given online during a multi-day window, 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 and 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.) for a serious reason, and (2) states specifically the soonest you are able to take a makeup exam.

With missed deadlines for a week's individual "little things" (a reflection, a quiz, a discussion board post, etc.), thank you for understanding that it is simply not realistic for me to be constantly assessing and processing lots of individual requests for extensions because there are literally thousands of these items across all my students in my classes this semester. In appreciation of your understanding this, I am building in a cushion for the weekly module tasks

part of the grade: I will count only the top fraction (roughly 60%) of your scores in this area (subject to figuring out the exact breakdown and weighting between the different types of little things). So if you fail to do (or fail to do well on) only a few of them, it will not count against you. For a simplified example, if there were exactly 5 of these score opportunities and you scored 100%, 100%, 100%, 0%, 0%, then I count the top 3 out of 5 scores (3/5 = 60%) and you still have a 100% quiz average despite two quiz scores of 0!

If for any reason, you still feel overly anxious about your grade despite this generous safety net policy on the "little things", you will simply have the burden of sending the instructor some kind of verifiable or third-party documentation (such as doctor's note, jury summons, employer/athletic/military supervisor signed note) in advance if possible, but no later than 24 hours after the deadline; while I don't need to know every detail, I will ask for something more specific than just saying "I had personal/technology issues". Then, depending on the situation, the instructor will choose either to allow the assignment to be turned in late and graded or simply to declare your missed score to not affect your percentage of dropped scores allowed.

ALTERNATIVE WAY TO SUBMIT WORK IN CASE OF TECHNICAL ISSUES

Notice that the weekly HW is always due at 5pm Friday, but that there is a "grace period" until Sunday 11:59pm. What that means is that the work won't be counted "late" as long as it's done by Sunday night, but that "the technology was down" or "the HelpDesk was closed" won't be accepted as an excuse between Friday 5pm and Sunday 11:59pm. So this gives you the incentive to do 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 just need a couple more days to finish writing things up.

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 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 you can email me or the grader your backup document as a last resort.

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 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 during class discussions 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**;** **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. At the start of a term, CASS sometimes has 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**. 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**.

For each day that you attend campus—for any reason—you must complete the questions on the UTEP screening website (**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**

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.statisticsteacher.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) as well as free help with writing papers (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**

Student Support: 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 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 2nd floor computer lab, reconfigured with protocols for cleaning and social distancing: **https://libguides.utep.edu/service_updates**

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);

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
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