

PSY 302.51E Psychological Statistics

COURSE SYLLABUS: Fall 2019

INSTRUCTOR INFORMATION

Instructor: Robert Lockamyeir

Office Hours: By appointment

University Email Address: rlockamyeir@leomail.tamuc.edu

Preferred Form of Communication: E-mail

Communication Response Time: Within 24 hours

COURSE INFORMATION

Textbook(s) Required:

Statistics for Psychology (6th ed.) Aron, A., Coups, E., & Aron, E. N.

ISBN: 978 - 0205924174

Other Required Materials:

Calculator with square root and exponent functions. TI-30Xa is an example. **NO** phone calculators will be allowed.

Meeting time:

Tuesdays: Lecture 4:10-7:10; Lab 7:20-8:20

Note: You must be enrolled in both the 3 credit hour lecture AND the 1 credit hour lab.

Course Description

The logic and methods of descriptive and inferential statistics and their relation to experimental design in psychology are studied. Statistics plays an integral role in interpreting the results of research. You should exit this course knowing how and when to compute descriptive statistics (e.g., mean, variance, z-score, and correlation), and, how and when to compute inferential statistics (e.g., t-tests, ANOVA) to test hypotheses.

The syllabus/schedule are subject to change.

COURSE REQUIREMENTS

Instructional Methods

Attendance is absolutely mandatory and critical if you want to succeed in this course. Each week will build upon previously learned material so you must attend class each and every week. If, for whatever reason, you are to miss a week, let me know **BEFORE** class so we can make any arrangements that are necessary. Otherwise, get the notes from a fellow classmate and catch up on the week's material that you missed by reading the textbook. If you miss a week of class, this does not excuse you from turning in the homework that was due that day or the homework that is due the following week.

Student Responsibilities or Tips for Success in the Course

Questions about Grades

Any questions about a grade for a particular assignment or exam should be brought to the professor's attention within one week of the grades for that assignment or exam being posted.

Students are expected to:

- 1. Read the assigned material, which includes following the numeric examples closely and writing down questions about anything not entirely clear to you. Reading statistics requires close study and re-reading, not just reading through once as you might an ordinary book.
- 2. Completing the assigned homework problems (and turning them in on time). Statistics is a skill—it is necessary to DO statistics, not just read and understand. Practice is critical to understanding thoroughly.
- 3. Attending lectures, listening closely, asking questions—being sure to have done the reading first. DO NOT fall behind! Each chapter builds upon knowledge previously learned.
- 4. Studying for, taking, and reviewing answers for exams.
- 5. It is very important to treat this course like any other you would take. It is not a "math" class, however there is math involved. Understanding *why* you are doing each calculation, instead of just *how* to get to the answer will make things much easier.

GRADING

Final grades in this course will be based on the following scale:

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A = 90\%-100\% 675 – 750 points

B = 80\%-89\% 600 – 674 points

C = 70\%-79\% 525 – 599 points

D = 60\%-69\% 450 – 524 points

F = 59\% or Below 0 – 449 points
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Assessments

HOMEWORK ASSIGNMENTS (20 points each; 200 points total)

There will be 10 homework assignments during the semester. These assignments are designed to increase your understanding of the topics being covered and give you the opportunity to apply course material. All homework assignments come from the end of each chapter (Set II) of the textbook

- 1. Assignments should be hand written *neatly*, with all pages *stapled* (not paper clipped) together. **If I cannot read it, I cannot grade it.**
- 2. **Show your work** when working a problem involving formulas. At minimum, you should show each complete formula in its basic form filled in with numbers, at least one intermediate step, and the final answer. If no work is provided, no points will be rewarded.
- 3. *ABSOLUTELY NO LATE ASSIGNMENTS* will be accepted. If you are going to miss class, I will accept emailed assignments. Assignments sent through email must be received *before* the start of class, or else it becomes late.
- 4. Homework assignments are intended to be completed individually. **DO NOT WORK TOGETHER ON HOMEWORK ASSIGNMENTS.**
- 5. Homework assignments will be graded as follows:
 - a. Each homework assignment is worth 20 points.
 - b. Late assignments or assignments with no work will earn 0 points.

QUIZZES (20 points each; 100 points total)

It is helpful for you to **read the assigned chapters in the textbook**. To "encourage" that behavior, there will be **7 in-class quizzes**. Quizzes will be given at the beginning of class on the specified dates on the schedule below. They will be short and should not take any longer than 10-15 minutes. This class is cumulative so these quizzes are designed to assess your knowledge of the previous week's material. **Two (2) of these quizzes will be dropped**, so if you are to miss a class day in which there is a quiz, that quiz will count as one of your dropped quizzes.

EXAMS (Mid-semester exams: 100 points each; Final exam: 150 points; 450 points total) There will be three mid-semester exams and one final exam. Exams will be cumulative. On each exam, there will be questions relating to material covered on the previous exam(s). The final exam will include all previously covered material. The questions will require not only recognition of concepts and correct answers, but will be designed to test comprehension and application of concepts as well. Material for the exams will be drawn from the text, and the lectures. There will be no make-up exams except as mandated by University policy for University-excused absences, religious holidays and major illnesses. Students should contact the professor prior to the scheduled exam if possible, or within 24 hours of missing the exam due to accident or illness.

Students who can demonstrate a legitimate University-excused absences, religious holiday or major illnesses are allowed to miss one exam during the term. Their grade for that exam will be the average of the other exams (not counting the final).

Note: Unless specifically approved by me prior to the exam, use of electronic devices (e.g., cell phones, iPods, and the like) during the exam is strictly prohibited and will result in your exam being taken from you immediately.

RESEARCH PARTICIPATION

A goal of this class is to help you familiarize yourself with research methods. One way to obtain this goal is to have you participate in research studies. Participating in research studies contributes to students and faculty at A&M - Commerce, your understanding of how research is conducted, and human knowledge in general. For this course, participating in research will be extra credit. You will have the opportunity to earn up to 20 points depending on the amount of research you participate in. Each credit hour of research will be worth 5 extra credit points that will be added to your total pool of points. So, for example, if you participate in 4 credit hours of research, you will earn the full 20 extra points. For more information, please visit D2L and download the extra credit research participation document.

TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
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Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome TM	Latest	N/A
Apple® Safari®	Latest	N/A

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS [®]	Safari, Chrome	The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - o 512 MB of RAM, 1 GB or more preferred
 - o Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

- For YouSeeU Sync Meeting sessions <u>8 Mbps</u> is required. Additional system requirements found here: https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements
- You must have a:
 - o Sound card, which is usually integrated into your desktop or laptop computer
 - o Speakers or headphones.
 - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: <u>JAVA web site</u> http://www.java.com/en/download/manual.jsp
- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.

JavaScript is enabled.

Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - o Adobe Reader https://get.adobe.com/reader/
 - o Adobe Flash Player (version 17 or later) https://get.adobe.com/flashplayer/
 - o Adobe Shockwave Player https://get.adobe.com/shockwave/
 - o Apple Quick Time http://www.apple.com/quicktime/download/
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or help-password.com/hep-passw

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Need Help? Student Support

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

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words "click here" to submit an issue via email.



System Maintenance

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

Interaction with Instructor Statement

EMAIL POLICY

The instructor is available virtually by email. If you would like to schedule an appointment, the best way is to email. We can then set up a time to chat when it is convenient for you. During posted office hours, the instructor will return emails upon receipt. Outside of these times, please allow 24 hours to receive a response on weekdays. If you email me and do not receive an email response within, 48 hours, most likely, your email was not received.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

If you are to miss an exam, you must let me know **BEFORE** the day of the exam so we can make the appropriate arrangements. You are allowed to make up missed exams, but **ONLY** if you plan with me ahead of time. If you miss an exam and do not contact be **BEFORE** the date it is scheduled to be taken, you will be given a 0 for this assessment.

The syllabus/schedule are subject to change.

Syllabus Change Policy

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

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

 $\frac{http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx}{px}$

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

TAMUC Attendance

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

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

 $\frac{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf}$

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce Gee Library- Room 162

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

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url:

 $\underline{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf$

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

COURSE OUTLINE / CALENDAR

Date	Reading	Topic
8/27	Chapter 1	Syllabus and introduction;
		Frequency tables and describing a distribution
9/3	Chapter 2	Central tendency and variability
		Chapter 1 Quiz
9/10	Chapter 3	Z scores, the normal curve, and probability
		Chapter 2 Quiz
9/17		Exam 1
9/24	Chapter 4	Introduction to hypothesis testing
10/1	Chapter 5	Hypothesis tests with means of samples
		Chapter 4 Quiz
10/8	Chapter 6	Decision errors and effect size
		Chapter 5 Quiz
10/15		Exam 2
10/22	Chapter 7	Introduction to t tests
10/29	Chapter 8	Independent means t test
		Chapter 7 Quiz
11/5		Exam 3
11/12	Chapter 9	One-way analysis of variance
11/19	Chapter 10	Factorial designs, main effects, and interactions
		Chapter 9 Quiz
11/26		Thanksgiving Break – No class
12/3		Final exam review
		Chapter 10 Quiz
12/10		Final exam

Homework Assignments & Due Dates:

- 1. Ch. 1: 11abc, 12a-f, 14abc, 16bcd (9/3)
- 2. Ch. 2: 11a-e, 13a-e, 17abc (9/10)
- 3. Ch. 3: 14a-g, 16a-j, 17a-e, 21ab (9/17)
- 4. Ch. 4: 13abcd, 17a, 18a (10/1)
- 5. Ch. 5: 14abcd, 19ab, 20ab, 21ab (10/8)
- 6. Ch. 6: 13abc, 14a-e (10/15)
- 7. Ch. 7: 14ab, 15ab, 17ab, 18ab (10/29)
- 8. Ch. 8: 14abc, 15a-e, 17ab, 18ab (11/5)
- 9. Ch. 9: 14a, 16aefghi (11/19)
- 10. Ch. 10: 12abcd, 13abcd (12/3)