



PSY 302.02E Psychological Statistics

COURSE SYLLABUS: Spring 2019

INSTRUCTOR INFORMATION

Instructor: Maria A. Carlson, Ph.D.

Office Location: Henderson 220

Office Hours: Tuesday & Thursday 1:00 – 3:30pm

Office Phone: 903 – 886 -5595

University Email Address: maria.carlson@tamuc.edu

Preferred Form of Communication: email

Communication Response Time: 24 – 48 hrs

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required:

Statistics for Psychology (6th ed.) Aron, A., Aron, E. N., & Coups, E.
ISBN: 978 – 0205924174

Other Required Materials:

calculator (TI – 30Xa or other model pending instructor approval)

Course Description

The logic and methods of descriptive and inferential statistics and their relation to experimental design in psychology are studied.

The syllabus/schedule are subject to change.

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.

COURSE REQUIREMENTS

Instructional Methods

This course is a face-to-face course with a lab that has been web-enhanced with D2L. Attendance is required for both the course and the lab. You will also need to use D2L on a regular basis to complete assignments and access class announcements. Please see the information below for technology requirements for accessing D2L.

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. You will also find it helpful to complete the How Are You Doing? sections.
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.
3. Attending lectures, listening closely, asking questions—being sure to have done the reading first. DON'T fall behind!
4. Attending lab sections led by the teaching assistants—be sure to bring questions from the reading with you. This is your chance to get real help with what is not completely clear and to pursue deeply whatever has excited you. (Yes, there can be exciting things in statistics!)
5. Studying for, taking, and reviewing answers for exams.

GRADING

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

| | |
|--------------|-------------------|
| A = 90%-100% | 895 – 1000 points |
| B = 80%-89% | 795 – 894 points |

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| | |
|------------------|------------------|
| C = 70%-79% | 695 – 794 points |
| D = 60%-69% | 595 – 694 points |
| F = 59% or Below | 0 – 594 points |

Assessments

HOMEWORK ASSIGNMENTS (20 points each)

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.

1. Assignments are to be turned in *at the start* of class.
2. Assignments should be hand written *neatly*, with all pages *stapled* (not paper clipped) together.
3. Show your work when working a problem involving formulas or include print outs of any work done using SPSS. At the minimum you should show each complete formula in its basic form filled in with numbers, at least one intermediate step, and the final answer.
4. Include your name and lab section on each assignment.
5. Assignments are due at the start of each class. If your assignment is more than 5 minutes late you will earn 0 points for that assignment. I will accept emailed assignments on an emergency basis only. Assignments sent through email must be received before the start of class.
6. **ABSOLUTELY NO LATE ASSIGNMENTS** will be accepted.
7. Homework assignments are intended to be completed individually. **DO NOT WORK TOGETHER ON HOMEWORK ASSIGNMENTS.**
8. **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.
 - c. 2 points will be deducted for each of the following:
 - i. Pages not stapled together.
 - ii. No name.
 - iii. No lab section.

QUIZZES (10 points each)

It is helpful for you to **read the assigned chapters in the textbook before class**. To “encourage” that behavior, you will be required to complete **10 online quizzes**. These will be available on D2L and **will cover all of the assigned readings**. Quizzes will be evenly spaced throughout the semester and are to be completed by **11:30 pm** on the dates specified on the schedule of topics below. Quizzes are intended to be completed individually. **DO NOT WORK TOGETHER ON QUIZZES.**

Note: Students who can demonstrate a legitimate University-excused absences, religious holiday or major illnesses are allowed to make-up one quiz during the term.

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Students should contact the professor prior to the missed quiz if possible, or within 24 hours of missing the quiz due to accident or illness.

EXAMS (3 mid-semester exams: 160 points each; Final exam: 220 points)

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 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, PDAs, iPods, and the like) during the exam is strictly prohibited and will result in your exam being taken from you immediately.

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:

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- 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) |
|-------------------------------|------------------------------|--------------------------------|
| Microsoft® Edge | Latest | N/A |
| Microsoft® Internet Explorer® | N/A | 11 |
| Mozilla® Firefox® | Latest, ESR | N/A |
| Google® Chrome™ | 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 | <p>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, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version.</p> <p>Chrome: Latest version for the iOS browser.</p> |

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| Device | Operating System | Browser | Supported Browser Version(s) |
|---------|------------------|-----------------------|--|
| 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:
 - 512 MB of RAM, 1 GB or more preferred
 - Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
 - Sound card, which is usually integrated into your desktop or laptop computer
 - 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: [JAVA web site http://www.java.com/en/download/manual.jsp](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:
 - [Adobe Reader https://get.adobe.com/reader/](https://get.adobe.com/reader/)
 - [Adobe Flash Player \(version 17 or later\) https://get.adobe.com/flashplayer/](https://get.adobe.com/flashplayer/)
 - [Adobe Shockwave Player https://get.adobe.com/shockwave/](https://get.adobe.com/shockwave/)
 - [Apple Quick Time http://www.apple.com/quicktime/download/](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

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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 helpdesk@tamuc.edu.

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

COMMUNICATION AND SUPPORT

Brightspace 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.

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COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

EMAIL POLICY

In addition to traditional face-to-face office hours, the instructor is available virtually by email during posted office hours. 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.

EMAIL GUIDELINES

In an attempt to provide a framework for professional communication, emails must contain the following:

- Subject Line: Course (e.g. PSY 322); additional information if desired (e.g. Hypothesis testing)
- Address the Reader: Open with Dr. Carlson
- Adhere to writing mechanics rules
- If asking for assistance with an issue, please list at least 3 things you have done to try and remediate the issue prior to contacting me (these should probably include looking at the syllabus/ course rubrics/ D2L, contacting a colleague, and checking your text, etc.)
- Close with your name

Please send emails from your University accounts. The instructor will not discuss grades over email. If you would like to discuss your grade, please make an appointment during office hours.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

RESEARCH PARTICIPATION

As part of your course requirement, you will need to complete a total of **6** credit hours of research participation. **HOWEVER**, if you do not have any unexcused no-shows (i.e. you do not show up for a study) you will be required to complete only **4** credit hours. Students who have completed their required credit hours will be allowed to complete additional credit hours for extra credit (not to exceed **10** total credit hours). You are **only allowed to complete 50% of your research credits via online studies**, the remaining credits need to be completed via laboratory studies.

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Failure to complete the required number of credits will result in the reduction of your final grade by one letter grade. That is, if you have an “A” and do not complete the required credits, your final grade will be a “B.”

You will be able to sign up for various studies through the SONA system. Instructions on how to do this will be provided in a separate handout. Studies are worth different amounts of credit depending upon how long it takes to complete the study. You may sign up for any combination of studies you wish as long as you complete the required number of credits.

A pre-screening questionnaire is required before participating in many of the studies. You may earn .5 credits by completing the pre-screening within the first two weeks of the semester.

The alternative to the research experiment participation will be to complete an original 2-page article summary for each credit hour. Instructions for completing the alternative research assignment can be found in the on D2L. If you choose to do the research alternative instead of the research experiments the **article summaries will be due by 11:30 pm Friday, December 3rd, 2019** and should be turned in to the submission box on D2L. More information about research participation and the alternative article summaries can be found on the D2L website.

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](#).
<http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf>

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 [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).
<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

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

Academic Integrity

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

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

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

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 132

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

Fax (903) 468-8148

Email: Rebecca.Tuerk@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.

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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 [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

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

COURSE OUTLINE / CALENDAR

| Week | Dates | SCHEDULE OF TOPICS AND EXAMS | | |
|------|-------------|--|--|--|
| | | TUESDAY | THURSDAY | LAB |
| 1 | 1/15 & 1/17 | Introduction and Syllabus | Central Tendency Chapter 2: 34 - 43 | NO LAB |
| 2 | 1/22 & 1/24 | Variability Chapter 2: 44 - 58 Quiz 1 Due | Z scores, Sample, and Population Chapter 3: 68 - 73, 84 - 89 | Basics of SPSS Ch. 2: 1, 2, 5ab |
| 3 | 1/29 & 1/31 | Normal Curve and Probability Chapter 3: 74 - 84, 89 - 99 Quiz 2 Due | Normal Curve and Probability Chapter 3: 74 - 84, 89 - 99 | Ch. 3: 1 - 7, 10a |
| 4 | 2/5 & 2/7 | Exam 1 Review Quiz 3 Due | Exam 1 | NO LAB |
| 5 | 2/12 & 2/14 | Core Logic and Steps of Testing Hypotheses Chapter 4: 108 - 125 | Core Logic and Steps of Testing Hypotheses Chapter 4: 108 - 125 Quiz 4 Due | Hypothesis Testing with SPSS Ch. 4: 2, 3, 4, 5, 6a, 7a, 8a |
| 6 | 2/19 & 2/21 | Hypothesis Tests with Means of Samples Chapter 5: 139 - 158 | Hypothesis Tests with Means of Samples Chapter 5: 139 - 158 Quiz 5 Due | Ch. 4: 2, 3, 4, 5, 6a, 7a, 8a Ch. 5: 2, 6ab, 8ab |
| 7 | 2/26 & 2/28 | Decision Errors Chapter 6: 177 - 180 | Exam 2 Review Quiz 6 Due | Ch. 6: 1, 2 |
| 8 | 3/5 & 3/7 | Exam 2 | One-Sample <i>t</i> Test Chapter 7: 226 - 240 | <i>t</i> Tests using SPSS Ch. 7: 1, 2ab, 3ab, 4, 5ab, 6ab |
| 9 | 3/12 & 3/14 | NO CLASS: SPRING BREAK | NO CLASS: SPRING BREAK | NO LAB |
| 10 | 3/19 & 3/21 | Dependent Means <i>t</i> Test Chapter 7: 240 - 258 | Dependent Means <i>t</i> Test Chapter 7: 240 - 258 Quiz 7 Due | Ch. 7: 1, 2ab, 3ab, 4, 5ab, 6ab |
| 11 | 3/26 & 3/28 | Independent Means <i>t</i> Test Chapter 8: 275 - 301 | Independent Means <i>t</i> Test Chapter 8: 275 - 301 | Ch. 8: 1, 2, 3, 4ab, 5ab |
| 12 | 4/2 & 4/4 | Exam Review Quiz 8 Due | Exam 3 | NO LAB |
| 13 | 4/9 & 4/11 | One-Way Analysis of Variance Chapter 9: 316 - 358 | One-Way Analysis of Variance Chapter 9: 316 - 358 | One - Way ANOVA using SPSS Ch. 9: 1, 2ab, 3abef, 7 |
| 14 | 4/16 & 4/18 | One-Way Analysis of Variance Chapter 9: 316 - 358 Quiz 9 Due | Factorial Designs and Interaction Effects Chapter 10: 377 - 393 | Ch. 9: 1, 2ab, 3abef, 7 Ch. 10: 1 - 3, 6 |
| 15 | 4/23 & 4/25 | Factorial Designs and Interaction Effects Chapter 10: 377 - 393 | Two - Way Analysis of Variance Chapter 10: 393 - 418 | Ch. 10: 1 - 3, 6 |
| 16 | 4/30 & 5/2 | Two - Way Analysis of Variance Chapter 10: 393 - 418 | Final Exam Review Quiz 10 Due | Ch. 10: 1 - 3, 6 |

***Final Exam Tuesday, May 7th 10:30am – 12:30pm.**

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