

Texas A&M University – Central Texas
PSYC 3330-110: Statistics for the Behavioral Sciences
Spring 2018

Tuesday & Thursday, 11:00 am to 12:15 pm

Instructor: Daniel A. Clark **Office:** Warrior Hall 318 I
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Office hours: : **Monday: 8:30 - 9:15am, 11:00 am - 1 pm.**
Tuesday: 8:30 - 10:45am, 12:30pm - 1:00 pm
Wednesday: 8:30 - 9:15am, 11:00 am - 1 pm.
Thursday: 8:30 - 10:45am, 12:30pm - 1:00 pm
Friday: Online by Appointment

To set up an appointment, go to: <https://clark-psychologytamuct.youcanbook.me>

911 Cellular:

Emergency Warning System for Texas A&M University – Central Texas
911Cellular is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via email, text message, and social media. All students are automatically enrolled in 911 Cellular through their myCT email account.

Connect at [911Cellular](https://portal.publicsafetycloud.net/Texas-AM-Central/alert-management) [https://portal.publicsafetycloud.net/Texas-AM-Central/alert-management] to change where you receive your alerts or to opt out. By staying enrolled in 911Cellular, university officials can quickly pass on safety-related information, regardless of your location.

Required textbooks:

- 1) Gravetter, F.J., & Wallnau, L.B. (2012). *Statistics for the Behavioral Sciences*. Boston, MA: Pearson/Allyn & Bacon. (ISBN: 987-0205-35867-0)

- 2) American Psychological Association. (2009). *Publication manual of the American psychological association* (6th ed.). Washington, DC: Author. (ISBN: 978-1-4338-0561-5)

Catalog course description:

Learning outcomes (LO): Upon satisfactory completion of this course, students will:

Course Objectives:

1. *Demonstrate factual knowledge of basic statistical vocabulary and computations.* Students will define key terms in their own words. Students will hand calculate measures of central tendency and variability, z scores, correlation coefficients, regression equations, analyses of variance and chi-square. Students will demonstrate their ability to define terms and compute functions on Homework Problems, Chapter Quizzes (optional), and Exams.
2. *Demonstrate factual knowledge of fundamental principles, generalizations, or theories regarding basic statistics.* Students will read and write about theoretical concepts underlying descriptive and inferential statistics, including frequency distributions and graphing, empirical distributions, theoretical distributions, sampling distributions, and the logic underlying confidence intervals and hypothesis testing. Students will demonstrate their ability to explain selected concepts on the Key Concept writing assignments.

3. *Demonstrate specific skills, competencies, and points of view needed by professionals in the field.* As future professionals with a Psychology or related degree, students will need to know how to use statistical computing software to perform statistical analyses and will need to know how to write the results of these analyses in the style adopted by this field. Therefore, students will demonstrate their ability to perform statistical analyses in SPSS by producing and labeling SPSS output. Students will demonstrate their ability to use appropriate APA style by translating the raw results of statistical analyses into written APA style Results sections submitted as Application Essays.
4. *Apply course material to improve thinking, problem solving, and decision making.* Students will apply course material to improve decision making by writing personally-relevant Application Essays that require the use of statistical information to solve personal problems that span a variety of topics. Students will apply course material to develop metacognitive thinking by 1) reflecting on personal experiences with learning course content and completing course assignments, 2) documenting study time and rating the helpfulness of assignments on Weekly Reflections, and 3) creating and /or revising study strategies for upcoming lessons.

Learning Evaluation Methods:

Assignments (30%): During every week that does not have a quiz, an assignment will be given over the material that is covered during that week (17 assignments total). These assignments will be completed on Canvas. The assignments will be due on the indicated date (see the schedule below) before class begins and will not be accepted for credit afterwards. It is recommended that students begin the assignments a few days before the due date so that they may be able to get help if needed. If a student makes a legitimate effort (as defined by the instructor) on an assignment and receives below a 70, the instructor may give the student the grade of a 70 for the effort.

Quizzes (60%): After completing 3-4 chapters of materials, students will take a quiz over what they have learned (5 quizzes total). These quizzes will have approximately 40-50 questions and will be comprised of both multiple choice and fill in the blank questions. Each quiz will require students to analyze data during the quiz. Students will use the computers in the classroom to analyze data and answer quiz questions.

Participation (10%): Although I would prefer not to give you a grade for participation, I have learned that requiring participation improves grades. Therefore, I am doing this for your benefit. This grade consists of the percentage of classes that you attend, assessed by an electronic system that will be explained in class. Students are responsible for notifying me of University approved absences before the day of class.

Final course grades will follow the system below:

A = 90.00+ total points, **B** = 80.00-89.99 points, **C** = 70.00-79.99 points, **D** = 62.00-69.99 points, **F** = 61.99 or fewer points

Research Participation

Research Experience Requirement: Students in selected psychology courses (PSYC 3307, PSYC 3309, PSYC 3330, PSYC 3312, PSYC 4320) are required to engage in research experience activities as part of the course. The research experience activity includes either participating in research studies directly related to psychology, writing summaries of peer reviewed empirical research articles, or a combination of both.

Sign Up: To receive credit for a research experience activity, students must sign up to participate in a research study or write a research summary through the Counseling and Psychology Research Sign-Up System hosted by [SONA](https://tamuct.sona-systems.com) (<https://tamuct.sona-systems.com>). Students should access the TAMUCT SONA website and request an account using their TAMUCT email account. Students must verify their account requests before being granted access to the system. Once the account is verified, students will be able to sign-up for research experience activities. A [tutorial video](#) is provided for using SONA (https://www.youtube.com/watch?v=_1OnT2ZU6QQ). Students who have problems signing up for SONA or have questions should contact the SONA coordinator Melissa Sanchez (ms057@my.tamuct.edu).

Credits: Students are required to complete 3 research credits in this course. The first research credit must be earned before the middle of the course (midterm). Credit is allotted as follows and is determined by the researcher (not the course instructor) based on estimated participation time:

- 1 credit for each hour (60 minutes) of research participation (in-person or online)
- 1/2 credit for each 1/2 hour (30 minutes) of research participation (in-person or online)
- 1 credit for each summary of a peer-reviewed, empirical research article.

Students who drop a class after having earned research experience credit cannot apply any accumulated credit from that class towards the next time they take the course.

Penalties: Any student who has not earned 1 research credit before the halfway point of the course (midterm) will be penalized 1 letter grade on the final course grade. Any student who has not earned all required research credits prior to the opening of the final exam period for the course will lose 1 letter grade on the final course grade for every research credit short of the required 3 research credits (e.g., missing 2 credits will result in a 2 letter grade reduction in the final course grade).

You will also need to utilize specialized software for statistical calculations. For the current course, we will be using SPSS. Using this software is required for this course, but purchasing for yourself is not required.

If you choose to download SPSS for yourself with a student discount, you need to make sure that you purchase the “Standard Grad Pack”(NOT THE “BASE grad pack”) if you want the software to be able to complete all of the calculations required for this course. You may find a discounts for students at the websites listed on this page: <http://www-03.ibm.com/software/products/en/spss-stats-gradpack>

Technology Requirements

This course will use the A&M-Central Texas Instructure Canvas learning management system. Logon to A&M-Central Texas Canvas [<https://tamuct.instructure.com>].

Username: Your MyCT username (xx123 or everything before the "@" in your MyCT e-mail address) Password: Your MyCT password

Canvas Support

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select “Chat with Canvas Support,” submit a support request through “Report a Problem,” or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

Other Technology Support

For log-in problems, students should contact Help Desk Central.

24 hours a day, 7 days a week:

Email: helpdesk@tam.u.edu

Phone: (254) 519-5466

[Web Chat](http://hdc.tam.u.edu): [<http://hdc.tam.u.edu>]

Please let the support technician know you are an A&M-Central Texas student.

UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

Drop Policy.

If you discover that you need to drop this class, you must complete a [Drop Request Form](https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf) [https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf].

Professors cannot drop students; this is always the responsibility of the student. The Registrar’s Office will provide a deadline on the Academic Calendar for which the form must be completed, signed and returned. Once you return the signed form to the Registrar’s Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar’s Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

Academic Integrity.

Texas A&M University -Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Academic integrity is defined as a commitment to honesty, trust, fairness, respect, and responsibility. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. Academic misconduct is any act that improperly affects a true and honest evaluation of a student’s academic performance and includes, but is not limited to, cheating on an examination or other academic work, plagiarism and improper citation of sources, using another student’s work, collusion, and the abuse of resource materials. All academic misconduct concerns will be reported to the university’s Office of Student Conduct. Ignorance of the university’s standards and expectations is never an excuse to act with a lack of integrity. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

Academic Accommodations.

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier free education. The Department of Access and Inclusion is responsible for ensuring that students with a disability receive equal access to the University's programs, services and activities. If you believe you have a disability requiring reasonable accommodations please contact the Department of Access and Inclusion at (254) 501-5831. Any information you provide is private and confidential and will be treated as such.

For more information please visit our [Access & Inclusion](https://www.tamuct.edu/student-affairs/access-inclusion.html) webpage [https://www.tamuct.edu/student-affairs/access-inclusion.html].

Texas A&M University-Central Texas supports students who are pregnant and/or parenting. In accordance with requirements of Title IX and guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. For more information, please visit <https://www.tamuct.departments/index.php>. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines](http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf) online, please visit the website [http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender – including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Division of Student Affairs at 254-501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

Tutoring.

Tutoring is available to all A&M-Central Texas students, both on-campus and online. On-campus subjects tutored include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Tutors are available at the Tutoring Center in Warrior Hall, Suite 111.

If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, or any other question, contact Academic Support Programs at 254-519-5796, or by emailing Dr. DeEadra Albert-Green at deeadra.albertgreen@tamuct.edu.

Chat live with a tutor 24/7 for almost any subject on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log-in and receive FREE online tutoring and writing support. This tool provides tutoring in over forty subject areas. Access Tutor.com through Canvas.

University Writing Center: Located in 416 Warrior Hall, the University Writing Center (UWC) at Texas A&M University-Central Texas is a free workspace open to all TAMUCT students from 10am-5pm Monday-Thursday with satellite hours in the University Library Monday-Thursday from 6:00-9:00pm. Students may arrange a one-on-one session with a trained and experienced writing tutor by visiting the UWC during normal operating hours (both half-hour and hour sessions are available) or by making an appointment via [WOnline](https://tamuct.mywconline.com/) at [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu to schedule an online tutoring session. Tutors are prepared to help writers of all levels and abilities at any stage of the writing process.

While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the University Writing Center is here to help!

If you have any questions about the University Writing Center, please do not hesitate to contact Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu.

University Library.

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 250,000 eBooks and 82,000 journals, in addition to the 72,000 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On-campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available twenty-four hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place on Skype or in-person at the library. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our [Library website](https://tamuct.libguides.com/) [https://tamuct.libguides.com/].

OPTIONAL POLICY STATEMENTS:

A Note about Sexual Violence at A&M-Central Texas

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Counseling (254-501-5955) located on the second floor of Warrior Hall (207L).

Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don't agree with their behaviors and tell survivors we will support them. Your actions matter. Don't be a bystander; be an agent of change. For additional information on campus policy and resources visit the [Title IX webpage](https://www.tamuct.edu/departments/compliance/titleix.php) [<https://www.tamuct.edu/departments/compliance/titleix.php>].

Statistics in Behavioral Sciences - FH 407

Week	Date	Topic	Due
1	1/16	Syllabus/Introduction	
	1/18	Chp. 1: Intro & Measurement Basics	
2	1/23	Chp. 2 Frequency Distributions	A.1
	1/25	Chp. 3: Measures of Central Tendency	A.2
3	1/30	Chp. 4: Measures of Variability	
	2/1	Unit 1 Review	A.3
4	2/6	Quiz 1	
	2/8	Chp. 5: Z-scores & Probability	
5	2/13	Chp. 6: Probability & The Normal Curve	A.4
	2/15	Chp. 6: Area Under the Curve	
6	2/20	Chp. 7: Sample distributions	A.5
	2/22	Unit 2 Review	A.6
7	2/27	Quiz 2	
	3/1	Chp. 8: Intro to Hypothesis Testing Part 1	
8	3/6	Chp. 8: Intro to Hypothesis Testing Part 2	
	3/8	Chp. 9: Hypothesis testing & the t-statistic	A.7
9	3/20	Chp. 10: Independent Samples t-test	A.8
	3/22	Chp. 11: T-test Assumptions & Effect Sizes	A.9
10	3/27	Chp. 9-11: Dependent Samples Designs	A.10
	3/29	Unit 3 Review	
11	4/3	Quiz 3	
	4/5	Chp. 12: Introduction to Analysis of Variance	
12	4/10	Chp. 13: Repeated Measures ANOVA	A.11
	4/12	Chp. 14: Factorial ANOVA Part 1	A.12
13	4/17	Chp. 14: Factorial ANOVA Part 2	A.13
	4/19	Unit 4 Review	A.14
14	4/24	Quiz 4	
	4/26	Chp. 15: The Correlation	
15	5/1	Chp. 16: Linear Regression	A.15
	5/3	Chp. 17: Chi-Squared	A.16
16	5/8	Unit 5 Review	A.17
	5/10	Quiz 5	