

**Texas A&M University Central Texas**  
**PSYC 5300-110 (80173) Behavioral Statistics**  
**Fall 2019**

**COURSE DATES, MODALITY, AND LOCATION**

**Mondays/Wednesdays 4:00pm-5:15 pm**

August 26<sup>th</sup>-December 13<sup>th</sup>

Founders Hall 407-Lecture/Web enhanced

*This course meets face-to-face), with supplemental materials made available online through the A&M-Central Texas Canvas Learning Management System*

[<https://tamuct.instructure.com/>].

**INSTRUCTOR AND CONTACT INFORMATION**

**Instructor:** Stephanie Weigel, Ph.D.

**Office:** Warrior Hall 318 P

**Phone:** 254.307.0622

**Email:** [sweigel@tamuct.edu](mailto:sweigel@tamuct.edu)

**Office Hours:** Monday & Wednesday 10am-11:am, 2:00pm-4:00pm; Tuesday 11:00am-2:00pm

**Student-instructor interaction**

Learning is best supported by interaction. It is important that you feel comfortable asking questions and communicating during class discussions. This will help support your learning and that of your fellow students. Some questions are best saved for outside of the classroom. The best way to contact me for these discussions is via email. We can set up an appointment if needed or you can come by during my scheduled office hours. I will check my campus email daily on weekdays and do my best to respond within 48 hours.

**Participation and Attendance**

As stated above, interaction with the instructor and your peers is critical for learning and your academic success. Attendance will be taken at every class meeting. However, if you must miss class it is your responsibility to review the materials posted in the online classroom and find out what you missed by communicating with your classmates. Attendance and participation in discussions are a portion of the points towards your final grade (see below).

**COURSE INFORMATION**

**Course Overview and description:**

COUN/PSYC 5300 provides a review of descriptive statistics with emphasis on inferential statistics. Learn correlation, one-way and two-way analysis of variance, regression analysis and experimental design. Use of computer software with emphasis on experience with SPSS.

Prerequisite(s): undergraduate statistics recommended.

## Student Learning Outcomes

1. *Demonstrate comprehension and application of factual knowledge (terminology, classifications, methods, trends).* Students will calculate measures of central tendency and variability, z scores, correlation coefficients, regression equations, analyses of variance and chi-square both by hand and using standard office software and SPSS to solve problems. Students will demonstrate their ability to define terms and compute functions on Homework Problems, SPSS assignments, and Exams.
2. *Demonstrate comprehension and application of factual knowledge of fundamental principles, generalizations, or theories regarding basic statistics.* Students will read, discuss, and write about theoretical concepts underlying descriptive and inferential statistics, including frequency distributions and graphing, empirical distributions, theoretical distributions (including the normal distribution), sampling distributions, the Central Limit Theorem, and the logic underlying confidence intervals and hypothesis testing. Students will demonstrate their ability to discuss and write about selected concepts on the Article Analysis Discussions, Homework Problems, and Exams.
3. *Integrate course material to improve thinking, problem solving, and decisions.* Students will identify the variables under study, state research hypotheses, choose the appropriate descriptive methods, identify the independent and dependent variables, locate the number of samples under study, locate the number of scores per participant, select the appropriate inferential or correlational tests, draw statistical conclusions from the numerical results of their analyses, and present them in APA style. Examples and problems will be applied to research in counseling and psychology. Students will demonstrate these skills on Homework Problems, SPSS Assignments, APA style Results Sections, Article Analysis Discussions, and Exams.
4. *Analyze and critically evaluate ideas, arguments, and points of view. Students will respond to others' writing (including that of peers and experts in the field) on statistical concepts and substantiate their comments with course materials.* Students will derive null and alternative research hypotheses that are supported by information provided for research scenarios. Students will demonstrate their ability to critically evaluate ideas on the Article Analyses Discussions.
5. *Demonstrate skill in expressing oneself in writing.* Using appropriate APA style, students will write Article Analyses Discussions and APA-style Results Sections.

## Standards for Clinical Mental Health Counseling

In accordance with CACREP best practices standards for all counselors-in-training development, the following areas will be promoted in this course:

CACREP Standard Common Core for All Students:	Activity	SLOs
1. Understands the importance of research in advancing the counseling profession, including how to critique research to inform counseling practice (IIF8a)	Article Analysis Discussions;	SLO4
2. Understands qualitative, quantitative, and mixed research methods( IIF8f)	Article Analysis Discussions, Exams	SLO2

3. Understands designs used in research and program evaluation (IIF8g)	Homework Problems, SPSS Assignments, APA-style Results Sections, Article Analysis Discussion, Exams	SLO2
4. Use of statistical methods used in conducting research and program evaluation (IIF8h)	Discussions, Article Analysis Discussion, Homework Problems, Exams	SLO1
5. Basic concepts of analysis and use of data in counseling (IIF8i)	Homework Problems, SPSS Assignments, Exams	SLO1
6. Statistical concepts, including scales of measurement, central tendency, variability, distributions, and correlations	Homework Problems, SPSS Assignments, Exams	SLO2
7. Reliability and validity in the use of assessments.	Article Analysis Discussion, Homework Problems, Exams	SLO2

### Required Reading and Textbook(s)

- American Psychological Association. (2009). *Publication manual of the American psychological association* (6th ed.). Washington, DC: Author. (ISBN: 978-1-4338-0561-5)
- Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences* (10th ed.) Belmont, CA: Wadsworth. (ISBN: 978- 1305504912)
- Green, S. B., & Salkind, N. J. (2017). *Using SPSS for Windows and Macintosh: Analyzing and Understanding the Data* (8th ed). Boston: Pearson. (ISBN: 978-0-134319889)

### Required Electronic Resources

Mindtap Psychology for Gravetter/Wallnau's *Statistics for the Behavioral Sciences* is an online homework tool imbedded in the Canvas online course. Students can purchase access to Mindtap along with an electronic version of the book. A registration link is provided in Canvas.

IBM Statistical Package for the Social Sciences (SPSS) Standard GradPack v.24 is a computing software available for students on University computers free of charge. Students will need to access the software to complete several assignments in the course. Students can purchase their own subscription for their personal computers if desired.

### COURSE REQUIREMENTS

**Article Analysis Discussion** (5 Discussions X 30 points each) 150 points total- Students will work with their peers in small groups Students must be present and participate in the presentation to earn credit. Each student will be responsible for locating an article that applies the assigned statistical procedure in a psychology related study. The student will share the article with their group and facilitate a discussion about the use of the statistic. For full credit the student must post the article in CANVAS and actively participate in the discussion with peers. Group members must be present in class to receive credit.

**Chapter Homework** (15 X 30 points each) 450 points total- Students will complete assigned homework problems online in the CANVAS platform. Homework must be completed independently, without the help of classmates, but calculators, notes, textbook and tutor support may be used.

**SPSS Assignments** (7 Assignments X 20) 140 points total- Students will utilize SPSS software and data sets provided in CANVAS to complete these assignments. Practice using SPSS is provided in the SPSS textbook. Students must provide a copy of the SPSS handout WITH appropriate labels. Each assignment will specify what labels are required. Students may work together to generate the output files, but labels must be added independently.

**APA Style Results Section** (4 Results Sections X 40 points each) 160 points total- For selected SPSS assignments (described above) students will also submit an APA style Results Section. The purpose of this assignment is to practice using APA style to present research findings. The assignments should include: statement of variables, identification of the statistical test, alpha level, descriptive statistics, and statistical conclusions using correct APA style.

**Exams** (2 Exams X 50 points each) 100 points total- Two exams will assess students' comprehension of key concepts in the course. Exams will consist primarily of multiple choice items and will be completed online. Students may use notes and their text book for the exams, but they must be completed individually without consultation with other students or non-class materials such as "Google".

#### **Final Grading Criteria**

Article Analysis Discussions	150 points
Chapter Homework	450 points
SPSS Assignments	140 points
APA Style Results Section	160 points
Exams	100 points
<b>TOTAL Possible</b>	<b>1000 POINTS</b>

**Final grades will be based upon the percentage of total points earned:**

**A 90%-100% (900-1000) B 80%-89% (800-899 points) C 70%-79% (700-799 points) D 60%-69% (600-699 points) F 59% or less (599 points and below)**

#### **Posting of Grades**

All grades for the course will be posted in the Canvas Grade book. Grades for assignments and exams will be posted within 1 week of the due date or sooner. Feedback regarding the score will be provided as well, but I encourage you to ask questions about any grade or feedback for clarification.

## COURSE OUTLINE AND CALENDAR

Week	Topics & Assigned Readings (complete before class)	Assignments or Activities
<b>Week 1</b> 8/26	Course Introduction	
8/28	Frequency Distributions Read Ch 1&2	Ch 1 & 2 Homework
<b>Week 2</b> 9/2	<b>Labor Day/No Class</b>	<b>No Class</b>
9/4	Central Tendency Read Ch 3	Ch 3 Homework
<b>Week 3</b> 9/9	Variability Read Ch 4	
9/11	Variability	Ch 4 Homework
<b>Week 4</b> 9/16	z-scores Read Ch 5	Ch 5 Homework
9/18	Probability Read Ch 6	<b>SPSS #1</b>
<b>Week 5</b> 9/23	Probability & Samples Read Ch 7	<b>Application Discussion #1</b>
9/25	Probability & Samples	Ch 6 & 7 Homework
<b>Week 6</b> 9/30	Hypothesis Testing Read Ch 8	Ch 8 Homework
10/2	Hypothesis Testing	<b>Application Discussion #2</b>
<b>Week 7</b> 10/7		<b>Exam 1</b>
10/9	The t Statistic Read Ch 9	
<b>Week 8</b> 10/14	t Test for Two INDEPENDENT samples	Ch 9 Homework
10/16	More about Independent t Tests Read Ch 10	Ch 10 Homework
<b>Week 9</b> 10/21	The t Test for Two RELATED samples Read Ch 11	<b>SPSS #2, Results Section #1</b>
10/23	More about Related samples t Tests	Ch 11 Homework
<b>Week 10</b> 10/28		<b>Application Discussion #3</b>
10/30	Introduction to ANOVA Read Ch 12	<b>SPSS #3, Results Section #2</b>
<b>Week 11</b> 11/4	ANOVA continued	Ch 12 Homework
11/6	Repeated-Measures ANOVA Read Ch 13	Ch 13 Homework <b>SPSS #4</b>
<b>Week 12</b> 11/11	<b>Veterans Day/No Class</b>	<b>No Class</b>
11/13	Repeated-Measures ANOVA continued Read Ch 14	<b>Application Discussion #4</b> Chapter 14 Homework,
<b>Week 13</b> 11/18	Correlation, Read Ch 15	<b>SPSS #5,</b>
11/20	Correlation	Ch 15 Homework
<b>Week 14</b> 11/25	Regression, Read Ch 16	<b>SPSS #6, Result Section #4</b>
11/27	Regression	Ch 16 Homework
<b>Week 15</b> 12/2	Qualitative Data	<b>Application Discussion #5</b>
12/4	Using Chi-Square Read Ch 17	<b>SPSS #7, Chapter 17 Homework</b>
<b>Week 16</b> 12/9	Wrap up/Optional Review	
12/11		<b>Final Exam</b>

## Important University Dates

Date	Description
August 26, 2019	Classes Begin for Fall Semester
August 26, 2019	Add, Drop, and Late Registration Begins for 16- and First 8-week Classes \$25 Fee assessed for late registrants
August 28, 2019	Deadline for Add, Drop, and Late Registration for 16- and First 8-week
September 2, 2019	Labor Day (University Closed)
September 11, 2019	Deadline to drop 16-week Classes with No Record
November 4, 2019	Registration Opens for Spring Semester
November 8, 2019	Deadline to Drop 16-Week Classes with a Quit (Q) or Withdraw (W)
November 11, 2019	Veteran's Day (University Closed)
November 28-29, 2019	Thanksgiving (University Closed)
December 13, 2019	Deadline for Applications for Tuition Rebate for Fall Graduation (5pm)
December 13, 2019	Deadline for Degree Conferral Applications to the Registrar's Office \$20 Late Application Fee
December 13, 2019	Deadline to Withdraw from University for 16- and Second 8-Week Classes
December 13, 2019	Fall Semester Ends

[Copied from the Academic Calendar: <https://www.tamuct.edu/registrar/academic-calendar.html>]

### WARRIOR SHIELD

#### Emergency Warning System for Texas A&M University-Central Texas

Warrior Shield 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 Warrior Shield through their myCT email account.

Connect to Warrior Shield by [911Cellular](https://portal.publicsafetycloud.net/Account/Login) [<https://portal.publicsafetycloud.net/Account/Login>] to change where you receive your alerts or to opt out. By staying enrolled in Warrior Shield, university officials can quickly pass on safety-related information, regardless of your location.

## TECHNOLOGY REQUIREMENTS AND SUPPORT

### 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/>] or access Canvas through the TAMUCT Online link in myCT [<https://tamuct.onecampus.com/>]. You will log in through our Microsoft portal.

Username: Your MyCT email address. Password: Your MyCT password

Students must have access to the internet and the ability to download and view attachments including Microsoft Word documents and PowerPoint slideshows; and streaming video. Students will also need to access academic online resources available through the University Library services.

### 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@tamu.edu](mailto:helpdesk@tamu.edu)

Phone: (254) 519-5466

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

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

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## 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](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.

For more [information regarding the Student Conduct process](https://www.tamuct.edu/student-affairs/student-conduct.html),

[<https://www.tamuct.edu/student-affairs/student-conduct.html>].

If you know of potential honor violations by other students, you may [submit a report](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0),

[[https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout\\_id=0](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0)].

## **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 Office 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 Office of Access and Inclusion, WH-212; or call (254) 501-5836. Any information you provide is private and confidential and will be treated as such.

For more information please visit our [Access & Inclusion](https://tamuct.instructure.com/courses/717) Canvas page (log-in required)

[<https://tamuct.instructure.com/courses/717>]

## **Important information for Pregnant and/or Parenting Students**

Texas A&M University-Central Texas supports students who are pregnant and/or parenting. In accordance with requirements of Title IX and related 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. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit [Student Affairs](https://www.tamuct.edu/student-affairs/index.html) [<https://www.tamuct.edu/student-affairs/index.html>]. 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 Associate Dean in 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. Subjects tutored on campus include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Tutors are available at the Tutoring Center in Warrior Hall, Suite 111. Tutor.com tutoring **will not** offer writing support beginning August 1, 2019.

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

Chat live with a tutor 24/7 for almost any subject from on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log in and receive online tutoring support at no additional cost. This tool provides tutoring in over 40 subject areas. Access Tutor.com through Canvas.

### **University Writing Center**

Located in Warrior Hall 416, the University Writing Center (UWC) at Texas A&M University–Central Texas (TAMUCT) is a free workspace open to all TAMUCT students from 10:00 a.m.-5:00 p.m. Monday thru Thursday with satellite hours in the University Library Monday thru Thursday from 6:00-9:00 p.m. This semester, the UWC is also offering online only hours from 12:00-3:00 p.m. on Saturdays.

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 UWC is here to help!

Students may arrange a one-to-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/) [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at [bruce.bowles@tamuct.edu](mailto:bruce.bowles@tamuct.edu) if you have any questions about the UWC and/or need any assistance with scheduling.

### **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 85,000 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 24 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](http://tamuct.libguides.com/index) [http://tamuct.libguides.com/index].

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## **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].

## **Behavioral Intervention**

Texas A&M University-Central Texas cares about the safety, health, and well-being of its students, faculty, staff, and community. If you are aware of individuals for whom you have a concern, who are exhibiting behaviors that pose a threat to safety, or individuals causing a significant disruption to our community, please make a referral to the Behavioral Intervention Team. You can complete the [referral](#) online [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout\_id=2].

Anonymous referrals are accepted. Please see the [Behavioral Intervention Team](#) website for more information [https://www.tamuct.edu/student-affairs/bat.html]. If a person's behavior poses an imminent threat to you or another, contact 911 or A&M-Central Texas University Police at 254-501-5800.

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## **INSTRUCTOR POLICIES**

### **Late Work Policy**

In order to make the most of the learning opportunities in the course it is very important for you to stay current with the readings and assignments. However, if you are unable to complete an assignment on time, please still complete and submit the assignment. Assignments will automatically receive a 10% point deduction if submitted after the due date. Assignments submitted later than 1 week after the original due date will not be accepted.

### **Copyright Notice**

Students should assume that all course material is copyrighted by the respective author(s). Reproduction of course material is prohibited without consent by the author and/or course instructor. Violation of copyright is against the law and Texas A&M University-Central Texas' Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.

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