

Texas A&M University - Central Texas  
 PSYC 5300.110 (10067) - Behavioral Statistics - Spring 2019

Instructor: Sam Fiala, Ph.D., L.P.  
 Class Meetings: M/W 4:00-5:15pm Warrior Hall 312  
 Office: Warrior Hall 318-B      Email: [sam.fiala@tamuct.edu](mailto:sam.fiala@tamuct.edu)      Office phone: 254-519-5759  
 Office hours (class): Mon-Thu 9am-10am (and by appt.)  
 Office hours (other): Mon-Wed 10am-12pm, Thur 10am-11am (and by appt.)  
 Course Web Page: <https://tamuct.instructure.com>

**Course Overview**

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:**

**Course Learning Outcomes and Assessments**

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 Concept Application 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, Research Article Analyses, 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 Concept Application Discussions and Research Article Analyses.
5. *Demonstrate skill in expressing oneself in writing.* Using appropriate APA style, students will write Research Article Analyses 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:

Table 1 CACREP Standards

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);	Concept Application Discussions; Research Article Analyses	SLO4
2. Understands qualitative, quantitative, and mixed research methods( IIF8f);	Concept Application Discussions; Exams	SLO2
3. Understands designs used in research and program evaluation (IIF8g);	Homework Problems, SPSS Assignments, APA-style Results Sections, Research Article Analyses, Exams	SLO2

CACREP Standard Common Core for All Students:	Activity	SLOs
4. Use of statistical methods used in conducting research and program evaluation (IIF8h);	Concept Application Discussions, Article Analysis, 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.	Concept Application Discussions, Article Analysis, Homework Problems, Exams	SLO2

## Mode of Instruction & Course Access

This is a *hybrid* course; however, course instruction and student interaction will primarily take place in the classroom setting. Online interactions for the course will rely on TAMUCT's learning management system (Canvas <<https://tamuct.instructure.com>>. See the *Technological Requirements* section of the syllabus for more information on accessing/using Canvas.

## Student-instructor Interactions

Learning is best fostered when open lines of communication are maintained among students and between students and the instructor. During our face-to-face interactions, I hope you will feel comfortable asking questions and offering your own course-relevant insights. Some students are so excited about the material that they share too often and dominate class discussions; when this happens, it can detract from the learning experiences of other students. For this reason, I suggest that if you find yourself making disproportionately more comments during a single class meeting than your colleagues, consider whether your comments are enhancing or diminishing the learning environment.

The best way to ask me a question or make a comment outside of the classroom is via my university email <sam.fiala@tamuct.edu>. I will check this email account daily M-F. I will strive to respond to you within 48 hours of receiving your message. I will also create a space in the discussion boards for you to pose general class questions to your colleagues. This is often a good place for students to help each other find the answers to course-relevant questions.

If you need to meet with me outside of my regularly scheduled office hours, you are welcome to drop by; I am typically on campus M-F all day. To make the most efficient use of your time, I suggest you email me ahead of time and schedule an appointment because I am often pulled out of my office into other meetings. I can also meet via phone or via Webex (this is a software feature in Canvas that can sometimes be really helpful because in addition to chat/voice functions, we can also be looking at a document simultaneously via the "application sharing" feature).

## Participation/Attendance

I have yet to meet a student who can learn statistics by simply reading the textbook and passively consuming knowledge. You really have to get in there and participate in class discussions/activities if you want to figure things out. I expect students to attend every scheduled class session. However, I do understand that "life does happen", and there may be times when you cannot be present. If you miss a class, it is your responsibility to find out what you missed by communicating with your classmates. Students will have an opportunity to earn points toward their course grade when in attendance (see below).

## Required Reading

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

Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences* (10<sup>th</sup> 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* (8<sup>th</sup> ed). Boston: Pearson. (ISBN: 978-0-134319889)

## Required Electronic Resources

Aplia Statistics for Psychology and the Behavioral Sciences. [Aplia](https://login.cengagebrain.com/cb/login.htm) is an online instructional and homework delivery tool custom-tailored to the Gravetter and Wallnau textbook. Students can purchase Aplia access, which comes with an e-book, at <https://login.cengagebrain.com/cb/login.htm>. If students do not already have an account, click the 'Create a New Account' button and enter the course key when prompted. Then follow the on-screen instructions. **The course key and instructions to register for Aplia access is located in the course materials in Canvas.**

IBM Statistical Package for the Social Sciences (SPSS) Standard GradPack v. 24. This computing software is widely used to compute statistical analyses and is available for students to use on University computers **free** of charge. If students live far from the University or do not want to use the computer lab resources, students can rent a subscription to SPSS for their personal computers at home. Students can purchase a 6-month or 12-month lease for the program via one of many online vendors. **Be sure to select the STANDARD GradPack not the BASE GradPack.** See the IBM website for a description of the product and a list of vendors: <http://www-03.ibm.com/software/products/en/spss-stats-gradpack>

*A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer (Sec. 51.9705).*

## Technological Requirements & Support

Students must be able to perform basic computer skills such as access the internet; log on to websites that require usernames and passwords; navigate tabs and links on web pages; open and send emails; create and send attachments; download and view attachments including Microsoft Word documents and PowerPoint slideshows; open and view streaming video; input and save information entered into online questionnaires; create, save, and upload files in widely-accessible formats (e.g., .rtf, .pdf, or .docx); copy, paste, and insert textboxes onto documents, and create folders on personal computers to organize and save completed work. Students will need reliable and frequent access to a computer and to the Internet.

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

### 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.*

For issues with Canvas, select "chat with Canvas support," submit a support request to Canvas Tier 1, or call the Canvas support line: 1-844-757-0953, links to all are found inside of Canvas using the "Help" link.

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

## Academic Honesty Policy

### 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.

My interactions with you are based on an expectation of mutual trust and honor. **You are required to do your own work on quizzes, exams, and assignments (unless I explicitly say otherwise).** Violation of this trust will result in an F in this course in addition to whatever consequences the administration deems appropriate. Collaboration and group study is often helpful in this course, but if you are unsure where the line is between appropriate collaboration and inappropriate collusion, please ask me.

## Library Services

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/].

## 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://www.tamuct.edu/student-affairs/access-inclusion.html) web page [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 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 the [Student Affairs](https://www.tamuct.edu/student-affairs/index.html) web page [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 online](http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf), 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.

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 FREE online tutoring and writing support. This tool provides tutoring in over 40 subject areas. Access Tutor.com through Canvas.

## 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 A&M-Central Texas, 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 Counseling Services (254-501-5956) located on the second floor of Warrior Hall.

Sexual violence can occur on a 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].

## 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 University 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.

## 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-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 [WCOOnline](#). 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.

### 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>] 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.

### What you will be graded on:

#### **I. Concept Application Discussions (28 Discussion Opportunities: 175 pts total max)**

Class meetings will frequently feature class discussions regarding application of concepts introduced in the text. At each class period you will be given a notecard on which you should record your name, the date, and your response to the in-class discussion prompt. Your response to the prompt **can be no longer than one sentence**. You can also rate your contribution(s) to that day's discussion. Your contributions will be evaluated using the rubric below:

*Table 2 Concept Application Discussion Rubric*

Points	Written response
0	*Absent/No response. *If you notify me 48 hours in advance of an absence, you can provide a response via email.
1	Response was longer than one sentence or failed to reflect understanding of the material.
2-3	Number of points earned within this range depends on depth of thought reflected in response.
Points	Classroom participation
0	Absent. Sorry, no make-ups (there are sufficient opportunities that full credit can be earned without perfect attendance).
1-3	Present and passively participating in the discussion. Number of points earned within this range depends on if you are awake, not on your phone, and not engaged in irrelevant sidebar conversations.
4	Present and clearly engaged in class discussion. At least once, you responded out loud to a question asked by the faculty.
5	Present and clearly engaged in class discussion. You repeatedly respond out loud to questions asked by the faculty OR one of your verbal responses indicates thoughtful consideration of course material.
6	Present and clearly engaged in class discussion. Your verbal contributions reflect a higher-level consideration of course concepts. This is often reflected in questions that you ask that evoke a response from the instructor such as, "Wow...that's a good question." Also, if you catch that I've made an error in writing a number or formula on the board and correct me (respectfully), you will also fall in this category.

\*If you notify me 48 hours in advance of an absence, you can provide a response via email for written response component.

**NOTE:** You will rate yourself on classroom participation (0-6). The first time your rating and my observation of your participation are discrepant (via overestimation on your part), we will have a conversation. If you continue to significantly rate your participation higher than is merited, this will be treated as an instance of **academic dishonesty**, you will receive no credit for any inflated ratings, and you will be reported to the Dean of Student Affairs.

#### **II. Chapter Homework Problems (17 x 15 pts each = 255 pts total)**

Conceptual and calculation problems similar to those found at the end of each chapter will be completed within Aplia. All homework assignments **must be completed independently**. To complete homework, students may use textbooks, notes, calculators, and

internet resources, but students may not use other people (i.e., classmates, friends, tutors) as resources to complete graded assignments. The tutor and peer groups are great resources, and you can work with them on problems in your book that are similar to the ones posted in Aplia.

### III. SPSS Assignments (10 x 15 pts each = 150 pts total)

Students will perform analyses using SPSS software and data sets found in our Canvas webpage to complete 10 assignments through the course of the semester. To prepare you for graded SPSS assignments, it is recommended that you read and work through the exercises in Units 1 through 4 of the SPSS book. Full credit will be awarded only for properly labeled assignments as indicated on each set of instructions. Without labels, there is no evidence that students have examined the output, and there is no evidence that students can interpret the output. To meet the goals of this assignment, it is not sufficient that students are able to generate SPSS output. Thus, students who submit SPSS output that is not labeled as specified in each assignment will not receive credit for their submissions. Labels to include on all SPSS output are explicitly stated in each assignment and vary depending on the type of analysis conducted. Points awarded for each label are stated on each assignment. Students may work together when running their analyses in SPSS, **but they must label their outputs and answer any questions in the assignment independently.**

### IV. APA Style Results Sections (4 x 30 pts each = 120 pts total)

For selected inferential analyses performed in the course as part of the SPSS assignments, students will write APA-style Results sections that state statistical conclusions from numerical results of each analysis in sentence format. The Results sections will be graded using the following grading rubric. **These assignments should be completed independently.**

Statement of Variables (Independent and Dependent)	0	1	2	3	4							
Statement of the Appropriate Statistical Test	0	1	2									
Statement of Alpha Level used for Statistical Tests	0	1	2									
Inclusion of Appropriate Descriptive Statistics ( <i>n</i> , <i>M</i> , <i>SD</i> for all groups)	0	1	2	3	4	5	6	7	8			
Statement of Statistical Conclusions (results explained in sentence format in terms of variables)	0	1	2	3	4	5	6	7	8	9	10	
Formatting of Statistics Supporting Conclusions (APA style presentation of numerical results)	0	1	2	3	4							

### V. Research Article Analysis (2 x 75 pts each = 150 pts total)

Students will choose from a group of approved empirical articles to review for completion of this assignment. Students will summarize the major sections of the chosen articles according to the format provided in Canvas. Students should use the grading rubric provided with the assignment to guide their writing.

### VI. Comprehensive Final Exam (150 pts)

A comprehensive final examination that includes all content discussed in the course will be given online during final exam week. In addition to a review of course material, the exam will require students to determine the appropriate statistical test for a research question and analysis of a data set to address the research question. Students may use textbooks, notes, and calculators when completing the exam. However, all exams must be completed independently without non-class resources (e.g., Google). **Students should use a hard-wired internet connection when taking all exams.** Wireless connections “blink,” and when they do, students will be logged out of the exam and not permitted to resume. If using a laptop, turn off the wireless switch. All computers should be physically plugged into the internet port on the wall with an internet cable before beginning exams. Direct all questions to the professor of the course.

### Grading

Concept Application Discussions	175
Chapter homework problems (17 x 15)	255
SPSS assignments (10 x 15)	150
APA Style Results Sections (4 x 30)	120
Research Article Analysis (2 x 75)	150
<u>Final exam</u>	<u>150</u>
TOTAL	1000

Course grades will be based on the percentage of total points earned by each student and will be assigned as follows:

A	90-100 %	B	80-89 %	C	70-79 %	D	60-69 %	F	(<60 %)
	900-1000 pts		800-899 pts		700-799 pts		600-699 pts		<600 pts
	Mastery of content		Above average understanding of content		Average understanding of content		Below average understanding of content		Failure to understand content

## **Late work policy**

If you turn in an assignment after the due date, you will receive a grade reduction of 10% for each day it's late (with a maximum reduction of 30%). **However, no late work will be accepted for assignments turned in more than 7 days past its due date.** No late work will be accepted after May 10<sup>th</sup> at 12pm (noon).

## **Some Thoughts About This Course**

For some students, statistics courses are intimidating...perhaps even scary. If you are one of the many students who fear stats because you believe "I'm no good at math", I've got good news for you: this isn't as much a math course as it is a language course and a logic course. The mathematics involved aren't especially complicated, but there are lots of terms and concepts to learn, and sometimes we use overly complicated language to describe simple ideas. I hope you give yourself a chance to excel in this course and that you find it to be a valuable experience. I believe it has the potential to be a surprisingly formative class for many students. Challenging yourself to think critically about the way data are used gets you to look at the world in a slightly different way (not necessarily the "right" way, but it is another perspective)

Unfortunately, I cannot grade you on your "perspective." Rather, I evaluate a product that you generate. This product is the result of your own intelligence, your effort, my ability to teach, and luck. It is unfortunate that luck enters the equation, but it is unavoidable. There may be semesters when life tosses you around quite a bit and earning a "C" is more impressive for you than the "A" that the person next to you earned. In these instances, I encourage you to take pride in your effort and not worry too much about grade that cannot perfectly represent your achievements. If at times it feels like everything is a jumble and the concepts have not yet taken seat in your mind, keep plugging...it will "click" for you, possibly at a different time than it does for others. Keep your alma mater's refrain in mind: "Never shall we yield!"

## **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. Copyright. (2018) by Sam Fiala at Texas A&M University-Central Texas, College of Education; 1001 Leadership Place, Killeen, TX 76549; 254-519-579; [sam.fiala@tamuct.edu](mailto:sam.fiala@tamuct.edu)

### **Important dates:**

January 16, Deadline for Add, Drop, and Late Registration for 16- and First 8-Week Classes

January 30, Deadline to Drop 16-Week Classes with No Record

March 1, Deadline for Graduation Application for Spring Ceremony Participation

April 5, Deadline to Drop 16-Week Classes with a Quit (Q) or Withdraw (W)

April 26, Student End of Course Survey Opens (16- and Second 8-Week Classes)

May 10, Deadline for Degree Conferral Applications to the Registrar's Office. \$20 Late Application Fee.

May 10, Commencement Ceremony Bell County Expo Center 7:00 p.m.

May 12, Student End of Course Survey Closes (16- and Second 8-Week Classes)

## COURSE CALENDAR

WEEK	READING	MONDAY	WEDNESDAY	DUE (SUNDAY 11:45PM)
<b>WEEK 1</b> JAN 14-20	Ch. 1 & 2 SPSS Unit 1 & 2	Introduction to Statistics	Frequency Distributions	Ch. 1 HW & Ch. 2 HW
<b>WEEK 2</b> JAN 21-27	Ch. 3 SPSS Unit 3 & 4	<b>MLK (no class)</b>	Central Tendency ( <b>online</b> )	Ch. 3 HW
<b>WEEK 3</b> JAN 28- FEB 3	Ch. 4 SPSS Unit 5	Variability	Variability <i>SPSS &amp; Writing APA Style</i>	Ch. 4 HW SPSS Lesson 20
<b>WEEK 4</b> FEB 4-10	Ch. 5 & 6	z-Scores	Probability	Ch. 5 HW & Ch. 6 HW
<b>WEEK 5</b> FEB 11-17	Ch. 7	Probability & Samples	Probability & Samples	Ch. 7 HW
<b>WEEK 6</b> FEB 18-24	Ch. 8	Introduction to Hypothesis Testing	Introduction to Hypothesis Testing	Ch. 8 HW
<b>WEEK 7</b> FEB 25- MAR 3	Ch. 9 SPSS Lesson 22	Introduction to the <i>t</i> Statistic	Introduction to the <i>t</i> Statistic <i>SPSS &amp; Writing APA Style</i>	Ch. 9 HW SPSS Lesson 22
<b>WEEK 8</b> MAR 4-10	Ch. 10 SPSS Lesson 24	The <i>t</i> Test for Two Independent Samples	The <i>t</i> Test for Two Independent Samples <i>SPSS &amp; Writing APA Style</i>	Ch. 10 HW SPSS Lesson 24 Results Section-1
<b>WEEK 9</b> MAR 11-17	A good book	<b>Spring Break (no class)</b>	<b>Spring Break (no class)</b>	
<b>WEEK 10</b> MAR 18-24	Ch. 11 SPSS Lesson 23	The <i>t</i> Test for Two Related Samples	The <i>t</i> Test for Two Related Samples <i>SPSS &amp; Writing APA Style</i>	Ch. 11 HW SPSS Lesson 23 Article Analysis-1
<b>WEEK 11</b> MAR 25-31	Ch. 12 SPSS Lesson 25	Introduction to ANOVA	Introduction to ANOVA SPSS & Writing APA Style	Ch. 12 HW SPSS Lesson 25 Results Section-2
<b>WEEK 12</b> APR 1-7	Ch. 13 SPSS Lesson 29	Repeated-Measures ANOVA	Repeated-Measures ANOVA <i>SPSS &amp; Writing APA Style</i>	Ch. 13 HW SPSS Lesson 29
<b>WEEK 13</b> APR 8-14	Ch. 14 SPSS Lesson 26	Two-Factor ANOVA	Two-Factor ANOVA <i>SPSS &amp; Writing APA Style</i>	Ch. 14 HW SPSS Lesson 26 Results Section-3
<b>WEEK 14</b> APR 15-21	Ch. 15 SPSS Lesson 31	Correlation	Correlation <i>SPSS &amp; Writing APA Style</i>	Ch. 15 HW SPSS Lesson 31
<b>WEEK 15</b> APR 22-28	Ch. 16 SPSS Lesson 34	Regression	Regression <i>SPSS &amp; Writing APA Style</i>	Ch. 16 HW SPSS Lesson 34 Results Section-4
<b>WEEK 16</b> APR 29- MAY 5	Ch. 17 SPSS Lesson 41	Qualitative Data Analysis	Chi-Square Statistic <i>SPSS &amp; Writing APA Style</i>	Ch. 17 HW SPSS Lesson 41 Article Analysis-2
<b>WEEK 17</b> MAY 6-12		REVIEW (OPTIONAL)	FINAL EXAM	

###large portions of this syllabus were blatantly pirated from a wide variety of sources###

##Professor reserves the right to amend the syllabus at any time##

Student Learning Outcomes Rubrics

SLO 1	Competence				
Homework Problems	No	Some	Basic	Above Average	Superior
Use of statistical methods used in conducting research and program evaluation (IIF8h);					
Basic concepts of analysis and use of data in counseling (IIF8i);					

SLO 2	Competence				
Research Article Analysis	No	Some	Basic	Above Average	Superior
Understands qualitative, quantitative, and mixed research methods( IIF8f);					
Understands designs used in research and program evaluation (IIF8g);					
Statistical concepts, including scales of measurement, central tendency, variability, distributions, and correlations.					
Reliability and validity in the use of assessments.					

SLO 3 & 4	Competence				
Concept Applications Discussion & Homework Assignments	No	Some	Basic	Above Average	Superior
Understands the importance of research in advancing the counseling profession, including how to critique research to inform counseling practice (IIF8a);					