

COUN 609: Introduction to Statistics for Counseling and Human Service Research

Course Syllabus: Spring 2019
Tuesdays from 7:20-10:00pm in Room 105 at CHEC (McKinney)

INSTRUCTOR INFORMATION

Instructor: Michael K. Schmit, PhD, LPC

Office Location: Binnion 220A (Commerce); CHEC (McKinney)

Office Hours: Tuesdays from 3-4:30pm and Thursdays from 3-4:30pm (CHEC in McKinney),

by appointment only

University Email Address: michael.schmit@tamuc.edu

Preferred Method of Communication: Email

Communication Response Time: 24-48 hours, Monday-Friday

Graduate Co-Instructor: Ashley Inbody

University Email Address: anibody1@leomail.tamuc.edu

COURSE INFORMATION

Materials - Textbooks, Readings, Supplementary Readings

Required Textbook

Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). Thousand Oaks, CA: Sage Publications.

American Psychological Association. (2019). *Publication manual of the American Psychological Association* (7th ed.). Washington, D.C.: American Psychological Association.

Note: This course will use D2L as it Learning Management System

**Other readings as assigned (see required supplemental readings below)

Software Requirement

The Statistical Package for the Social Sciences (SPSS; Version 24 or higher)—PREMIUM Grad Pack.

Note: SPSS Statistical software (version 24 or higher is recommended). About the cheapest place you can purchase and download a copy is from http://www.hearne.software/Home. Other sources include http://www.hearne.software/Home. Other sources include http://www.onthehub.com/spss/ and http://studentdiscounts.com (can be installed on two



computers). Be sure that you choose the **PREMIUM Grad Pack**. If you do not buy the Premium version, you will not be able to do the last few assignments for this class. You can get a 6 month or 12 month license. The software is also available on computers located in the student labs at the Metroplex and various labs on the Commerce campus.

Required Supplemental Readings

- Balkin, R. S. (n.d.). Research methods and statistics [website]. Retrieved from http://www.balkinresearchmethods.com/Balkin_Research_Methods/Research_Methods_and_ Statistics.html
- Balkin, R. S., & C. J. Sheperis (2011). Evaluating and reporting statistical power in counseling research. *Journal of Counseling & Development* 89(3), 228-272.
- Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 155-159.
- Watson, J. C., Lenz, A. S., Schmit, M. K., & Schmit, E. L. (2016). Calculating and reporting estimates of effect size in counseling outcome research. *Counseling Outcome Research & Evaluation*, 7, 2, 111-123.
- Wester, K. L., & Borders, L. D. (2014). Research competencies in counseling: A delphi study. *Journal of Counseling & Development*, 92, 4, 447-458.

COURSE DESCRIPTION

Catalogue Description of the Course

COUN 609. Introduction to Statistics for Counseling and Human Service Research
A doctoral-level introductory statistics course, emphasizing applications to counseling and
human service research. The major focus will involve an examination of basic statistical
procedures: descriptive statistics, hypothesis testing, and univariate inferential statistics. Usage
of a computer-based statistical software tool (Statistical Package for the Social Sciences) will be
emphasized. Meets requirements for a Level II research tool course. Prerequisite: Level I
research tool or equivalent or permission from the course instructor.

General Course Information

Introduction to Statistics for Counseling and Human Service Research is intended to provide doctoral-level students with training in introductory statistical techniques and is approved by the Graduate School as a Level II research tool. The emphasis in this course will be on understanding basic statistical concepts and applying and interpreting univariate tests of statistical inference applicable to counseling and human service research. Content will include but not be limited to: descriptive statistics, sample distributions, null hypothesis significance testing, effect size estimates and confidence intervals, statistical power, model assumptions, data screening and cleaning, visual representation and inspection of data, and univariate inferential statistics. The Statistical Package for the Social Sciences (SPSS; version 24 or higher) will be employed to assist in the analysis of data for this course. Students should have access to a



computer, SPSS software, and the Internet. Access is available at the Metroplex Center and on the Commerce campus in certain computer labs.

Doctoral Student Learning Outcomes

2009 CACREP Standards Addressed in COUN 609

Doctoral Standard	Learning Activity or Assignment	Assessment
IV.E.1. Understands univariate	Lecture, Reading (Field, 2018	Knowledge Quizzes 1-
and multivariate research	[Chapters 1-6, 8-10, 11, & 14];	10, Application
designs and data analysis	(Balkin, n.d. [www.	Assignments 1-5, In-
methods	balkinresearchmethods.com]), In-	class Presentation
	class Demonstration, Class	
	Discussion	
IV.E.3. Knows models and	Lectures, Readings (Chapter 18	Knowledge Quizzes 1-
methods of instrument design	[Field, 2018]; Articles by	10, In-class
	Abdullah et al. [1994] and Watson	Presentation
	[2017]), Class Activities, In-class	
	Demonstrations	
IV.G.2. Understands various	Lecture, Reading (Field, 2018	Knowledge Quizzes 7-
methods for evaluating	[Chapters 8-10, 12, & 14];	10, Application
counseling effectiveness.	(Balkin, n.d. [www.	Assignments 4 & 5,
	balkinresearchmethods.com]), In-	In-class Presentation.
	class Demonstration, Class	
	Discussion	

Content Areas include, but are not limited to, the following:

- I. Descriptive Statistics
 - A. Central Tendency: frequency, mean, median, and mode
 - B. Dispersion: range, quartiles, standard deviation, and variance
 - C. Z-scores
- II. Instrument Design
 - A. Model
 - B. Methods
 - C. Design
- III. Null Hypothesis Significance Testing
 - A. Sample distribution
 - B. *p*-value
 - C. Type 1 and Type II errors
 - D. Null and alternative hypothesis
- IV. Basic Statistical Concepts and Procedures
 - A. Model assumptions
 - B. Effect size estimates
 - C. Confidence intervals
 - D. Statistical power



- E. Visual representation and inspection of data
- F. Data cleaning
- V. Univariate Inferential Statistics
 - A t-test
 - B. dependent t-test
 - C. ANOVA
 - D. Factorial ANOVA
 - E. Correlation: Bivariate, simple regression, and logistic regression

COURSE REQUIREMENTS

Minimal Technical Skills Needed

In this class, you will utilize the Learning Management System (LMS) entitled D2L for portions of instructional and learning methods, submitting assignments, participating in online discussions, and completing quizzes. You will need to utilize other technologies such as SPSS, Microsoft Word, PowerPoint, etc. If you have issues with this system, it is your responsibility to contact the help desk immediately.

Instructional Methods

This course consists of lecture and didactic learning methods, small group discussions, and inclass assignments, demonstrations using SPSS, coupled with experiential learning and practical application. Be aware that a significant part of this class requires you to learn and become proficient with using SPSS. When we are not meeting face to face, you will be expected to participate and complete all online tasks via D2L In addition to this, small lecture, discussion, activities, and workshops may be utilized during this course.

Student Responsibilities or Tips for Success in the Course

As a student in this course, you are responsible for the active learning process. Expectations of this course include the following:

- 1. You are expected to display professionalism at all times. Be respectful of your professor and peers. Be open to feedback, as you will receive this throughout the program.
- 2. Prepare for classes. Complete any and all readings prior to class time.
- 3. Complete all assignments by the deadline.
- 4. Adhere to the university student code of conduct.
- 5. Participate. During face-to-face classes, you are expected to actively participate in all activities and discussion. In the online format, you are expected to participate in all online discussions/activities. This is crucial to your learning.
- 6. All writing assignments must be done according to APA 6th edition standards.
- 7. Regularly check your University email. My suggestion is to check this at least once a day as your instructors and others from the department and University may contact you.



- 8. Begin your readings ASAP. Sometimes it may take more than one attempt to digest the material.
- 9. Deadlines are the last possible moment something is due—not the first moment to start. Work ahead. I realize this may not always be possible; however, when you can, do so.
- 10. Be open to the process. This degree takes time, work, effort, and growth.

Assignments/Assessments

- 1. Five (5) Application Assignments (100 points total; 20 points each homework assignment): Five application assignments with be distributed in D2L throughout the semester. Application assignments will be pertinent to the information covered in class. You will have a week's time to complete each application assignment. Feel free to use your classmates as a resource, but your work is your own and must be submitted independently. Submission of homework may include an APA style write-ups (responses), result section write-ups, and pdf version of SPSS output. The goal of application assignments is to demonstrate your knowledge of various basic statistical procedures and concepts discussed in this course.
- 2. Ten (10) Knowledge Quizzes (100 points total; 10 point each quiz): Throughout the semester, 10 knowledge quizzes, one each week, starting at week 2 will afford students the opportunity to test their knowledge on various research and statistics concepts learned from course readings and class lectures discussed from the previous week (not cumulative in nature). Knowledge Quiz question will be presented in multiple choice, true/false, and short answer formats. Quizzes will be administered at the beginning of class on dates specified in the course schedule (see below). A missed quiz due to being absent or late to class, unless previous accommodations have been arranged, may result in a forfeit to take the quiz. The main purpose of knowledge quizzes is to ensure that content is reviewed prior to class. Your success in COUN 609 requires an investment in the course readings prior to arriving to class.
- 3. **In-Class Presentation (100 points):** Along with a partner, you will choose a statistical procedure, technique, or approach covered in class (starting at week 4 content) and demonstrate it to your peers through an 20-25 minute oral and visual presentation. One of the highest forms of learning is the ability to teach others.

The project will include a detailed overview of the statistical procedure, technique, or approach; a thorough demonstration of using the statistical procedure, technique, or approach with a detailed example, to include a constructed scenario (when appropriate); and a thorough exploration and explanation of how the statistical procedure, technique, or approach is applicable to counseling/human services or how results yielded from your selected procedure, technique, or approach is applicable to counseling/human services.

Please note that in some cases student dyads may have to develop their own dataset for



this project. More information will be provided throughout the semester. The goal of this presentation is to demonstrate your knowledge and skill in research and statistics as well as test your conceptualization of how to apply research findings to fields of counseling and human service.

In-Class Presentation Rubric

	III Clus	s Presentation Rubric	
	1 – Does not meet Expectation	2 – Meets Expectation	3 – Exceeds Expectation
Approval of topic by course instructor (10 points)	Approval of topic not received	Not Applicable	Approval of topic not received
Within 20-25 minute timeframe (10 points)	Not within 20-25 minute timeframe	Not Applicable	Within 20-25 minute timeframe
Detail description of procedure, technique, or approach (20 points)	Description of procedure, technique, or approach was insufficient or was incorrect; description lacked depth and detail; no evidence of knowledge about procedure, technique, or approach was communicated/eviden ced throughout the presentation; not representative of doctoral level work	Description of procedure, technique, or approach was sufficient (description provided reached beyond information from textbook) and was correct but missing one or two key elements; description had depth and detail but one or two elements missing/ incorrect; evidence of knowledge about procedure, technique, or approach was communicated/ evidenced through the presentation; representative of doctoral level work	Exceptional description of procedure, technique, or approach with no missing elements (description provided reached beyond information from textbook); description had depth and detail; clear evidence of knowledge about procedure, technique, or approach was communicated/demonstrated /evidenced through the presentation; representative of doctoral level work
Demonstration using statistical procedure, technique, or approach (20 points)	Demonstration was poorly executed, misleading, or incorrect; Or, demonstration was not relevant to the chosen procedure, technique, or approach; Demonstration lacked depth and detail; no evidence of knowledge about procedure, technique,	Demonstration was properly executed but missing one or two key elements; demonstration was relevant to the chosen procedure, technique, or approach; demonstration had depth and detail but missing one or two key elements; evidence of knowledge about procedure, technique, or approach was communicated/	Demonstration was properly executed with great precision and accuracy with no missing detail; demonstration was highly relevant to the chosen procedure, technique, or approach; demonstration had exceptional depth and detail; clear evidence of knowledge about procedure, technique, or approach was communicated/evidenced during demonstration;



	or approach was	evidenced during	representative of doctoral
	communicated/	demonstration;	level work
	evidenced during	representative of doctoral	level work
	demonstration;	level work	
	representative of	level work	
	doctoral level work		
Application of	An absence of (or	Clear evidence of how	Clear and well established)
(or findings	tangentially discussed	procedure, technique, or	(spoke/visual/enacted)
from)) how procedure,	approach (or findings	evidence of how procedure,
procedure,	technique, or approach	from) apply to	technique, or approach (or
technique, or	(or findings from)	counseling or human	findings from) apply to
approach to	apply to counseling or	service but missing one	counseling or human service
counseling or	human service; not	or two key elements;	with no missing detail;
human service	representative of	representative of doctoral	representative of doctoral
(20 points)	doctoral level work	level work	level work
Presentation	Information provided	Information provided	Information provided
and Presenter	appears disorganized/	appears fairly organized;	appears well-organized;
Qualities	disjointed; presenters	presenters appeared	presenters appeared
(20 points)	appeared unrehearsed	rehearsed but missed one	rehearsed (practice clearly
	(lack of practice);	or two key elements;	evident); presentation
	presentation quality	presentation quality was	material(s) were
	was inappropriate for	appropriate for doctoral	aesthetically pleasing;
	doctoral level work;	level work; 5-8 scholarly	presentation quality was
	less than 3 scholarly	sources were utilized	appropriate for doctoral
	sources were utilized		level work; 10+ scholarly
			sources were utilized

GRADING

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

90%-100% A 80%-89% B 70%-79% C 60%-69% D < 59% F

Assignment/Assessment	Point Value
Application Assignments	100
Knowledge Quizzes	100
In-class Presentation	100

Total points possible = 300. Your Final Grade is determined adding the point values earned from each assignment and dividing by 300. The resulting value is multiplied by 100 to yield a percentage. For example: $(240 \text{ [points earned]}/300) \times 100 = 80\%$



Assignments are due on the day noted in the syllabus. Unless noted otherwise, all assignments are due at the beginning of the class period. Late assignments will have 10% deduction per day late from the final score.

TECHNOLOGY REQUIREMENTS

Browser support

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

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

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

Note the following:

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

Desktop Support

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



Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Apple® Safari®	Latest	N/A

Tablet and Mobile Support

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

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - o 512 MB of RAM, 1 GB or more preferred
 - o Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- For YouSeeU Sync Meeting sessions <u>8 Mbps</u> is required. Additional system requirements found here: https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements
- You must have a:
 - o Sound card, which is usually integrated into your desktop or laptop computer
 - o Speakers or headphones.



- *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: <u>JAVA web site</u> http://www.java.com/en/download/manual.jsp
- Current anti-virus software must be installed and kept up to date.

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

Pop-ups are allowed.

JavaScript is enabled.

Cookies are enabled.

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

ACCESS AND NAVIGATION

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

Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

Interaction with Instructor Statement

Communication with your professors is key to your professional growth. I am here to support and guide you along your academic journey. With that being said, I cannot help you if you do not communicate with me. Please make an appointment if you have any concerns or questions. Because I teach in different locations, email is the best way to reach me. I will attempt to answer all emails within 24 hours, Monday-Friday, but at times will need up to 72 hours to do so. When emailing, please use your university email and address me with courtesy and respect.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Written assignments are due on the day noted in the syllabus. All papers are due at the beginning of the class period. Late papers will have 10% deduction per day late from the final score.

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 <u>Student Guidebook</u>.

 $\underline{\text{http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as}}\\ \underline{\text{px}}$

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

TAMUC Attendance

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

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

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

Academic Integrity

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

Undergraduate Academic Dishonesty 13.99.99.R0.03

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

Graduate Student Academic Dishonesty 13.99.99.R0.10

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

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this

Spring 2020

The *syllabus/schedule* are *subject to change*.



legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce Gee Library- Room 162 Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

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

Nondiscrimination Notice

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

Campus Concealed Carry Statement

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

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

Web url:

 $\frac{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34Safet}{yOfEmployeesAndStudents/34.06.02.R1.pdf}$

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

COURSE OUTLINE/CALENDAR

Date	Topic	Readings	Assignments
	1		

Spring 2020

The *syllabus/schedule* are *subject* to change.



2/4 Week 1	-Introductions -Syllabus -Course Overview and Expectations -Introduction to Statistics	-(Field, 2018 [Chapter 1]) -Wester & Borders (2014)	-Review Syllabus
2/11 Week 2	- Introduction to Statistics -Descriptive Statistics: Central Tendency and Dispersion	-(Field, 2018 [Chapter 1 & 2]) -Wester & Borders (2014) -(Balkin, n.d. [www.balkinresearchmethods.com])	Knowledge Quiz 1
2/18 Week 3	-Descriptive Statistics Cont.: z- scores -NHST: sample distribution	-(Field, 2018 [Chapter 2 & 3]) -(Balkin, n.d. [www.balkinresearchmethods.com])	-Knowledge Quiz 2
2/25 Week 4 TACES Conference (2/27 – 2/28)	-NHST Cont.: <i>p</i> -value, type 1 and type II errors, and null and alternative hypotheses	-(Field, 2018 [Chapter 2]) -(Balkin, n.d. [www.balkinresearchmethods.com])	-Knowledge Quiz 3 - Application Assignment 1
3/3 Week 5	-Model assumptions -SPSS environment	-(Field, 2018 [Chapter 4 & 6])	-Knowledge Quiz 4
3/10 Week 6	SPRING BREAK	SPRING BREAK	SPRING BREAK
3/17 Week 7	-Effect size estimates -Confidence intervals	-(Field, 2018 [Chapter 2 & 3]) - Watson, Lenz, Schmit, & Schmit (2016) - Cohen, J. (1992)	-Knowledge Quiz 5 - Application Assignment 2
3/24 Week 8	-Statistical power (and type 1 and type 2 error revisited)	-(Field, 2018 [Chapter 2]) - Balkin & Sheperis (2011) -(Balkin, n.d. [www.balkinresearchmethods.com])	-Knowledge Quiz 6
3/31 Week 9	- Visual representation and inspection of data -Data cleaning	-(Field, 2018 [Chapter 5 & 6])	-Knowledge Quiz 7 -Application Assignment 3
4/7 Week 10	-t-test -dependent t-test	-(Field, 2018 [Chapter 10])	-Knowledge Quiz 8
4/14 Week 11	ACA Conference – No Class	ACA Conference – No Class	ACA Conference – No Class



ACA Conference (4/16 – 4/19)			
4/21	-ANOVA	-(Field, 2018 [Chapter 12])	-Knowledge Quiz 9
Week 12			- Application
			Assignment 4
4/28	-Correlations:	-(Field, 2018 [Chapter 8 & 9])	-Knowledge Quiz 10
Week 13	Bivariate and		- Application
	regression		Assignment 5
5/5	In-Class	In-Class Presentations (potluck)	In-Class
Week 14	Presentations		Presentations
	(potluck)		(potluck)