

COUN 640: Advanced Multivariate Statistics for Course Syllabus: [Fall 2022, Online]

INSTRUCTOR INFORMATION

Instructor: James M. Devlin, PhD Office Location: Binnion 223 Office Hours: By appointment University Email Address: James.Devlin@tamuc.edu Preferred Method of Communication: Email Address Communication Response Time: 24 hours

COURSE INFORMATION Materials – Textbooks, Readings, Supplementary Readings

Required Textbook

Field, A. (2018). Discovering Statistics Using IBM SPSS Statistics (5th ed.). Sage Publications.

- Hancock, G. R., Stapleton, L. M., & Mueller, R. O. (2019). The reviewer's guide to quantitative methods in the social sciences (2nd ed.). Routledge.
- American Psychological Association. (2019). Publication manual of the American Psychological Association (7th ed.). Author.
- Note. This course will use D2L as it Learning Management System
- **Other readings as assigned

Required Supplemental Reading

- Giordano, A. L., & Cecil, A. L. (2014). Religious coping, spirituality, and hypersexual behavior among college students. Journal of Treatment & Prevention, 21(3), 225-239. https://doi.org/10.1080/10720162.2014.936542 (Hierarchical Multiple Regression)
- Giordano, A. L., Prosek, E. A., Bain, C., Malacara, A., Turner, J., Schunemann, K., & Schmit, M. K. (2020). Withdrawal symptoms among American collegiate Internet gamers. Journal of Mental Health Counseling, 42(1), 63-77.

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https://doi.org/10.17744/mehc.42.1.05 (MANOVA with discriminate analysis post hoc)

- Schmit, E. L., & Schmit, M. K., Reilly, R., & Fish, M. (2019). Gender differences of client evaluation of the working alliance in an acute care, inpatient treatment setting. Journal of Professional Counseling: Practice, Theory & Research, 46(1-2), 64-76. <u>https://doi.org/10.1080/15566382.2019.1673650</u> (MANOVA with discriminate analysis post hoc)
- Schmit, E. L., Schmit, M. K., & Lenz, A. S. (2016). Meta-analysis of solutionfocused brief therapy for treating symptoms of internalizing disorders. Counseling Outcome Research and Evaluation, 7(1), 21-39. <u>https://doi.org/10.1177/2150137815623836</u> (Meta-Analysis)
- Schmit, M. K., Oller, M. L., Tapia, J. L. Jr., & Schmit, E. L. (2020). A holistic client functioning profile comparison of persons with serious mental illness. Journal of Counseling & Development, 98(1), 3-16. <u>https://doi.org/10.1002/jcad.12295</u> (Covariate Profile Analysis)
- Schmit, M. K., Watson, J. C., & Fernandez, M. A. (2018). Examining the effectiveness of integrated behavioral and primary healthcare treatment. Journal of Counseling & Development, 96(1), 3-14. <u>https://doi.org/10.1002/jcad.12173</u> (Profile Analysis)
- Schmit, M. K., Watson, J. C., & Schmit, E. L. (2018). Using profile analysis in counseling outcome research. Counseling Outcome Research and Evaluation, 10(2), 94-105. https://doi.org/10.1080/21501378.2018.1443006 (How to Conduct Profile Analysis)
- 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 and Evaluation, 7(2), 111-123.
 https://doi.org/10.1177/2150137816660584 (Effect Size in Outcome Research)

Required Computer Software

The Statistical Package for the Social Sciences (SPSS; Version 24 or higher) computer software—PREMIUM GradPack.

Note: SPSS Statistical software (version 24 or higher is recommended). About the cheapest place you can purchase and download a copy is from <u>http://www.hearne.software/Home</u>. Other sources include <u>http://www.onthehub.com/spss/ and http://studentdiscounts.com</u> (can be installed on two computers). Be sure that you choose the PREMIUM GradPack. If you do not buy the Premium version, you will not be able to complete the 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.



COURSE DESCRIPTION

Catalogue Description of the Course

COUN 640. Advanced Multivariate Statistics for Counseling

An advanced doctoral-level statistics course, emphasizing applications to both counseling and other human services. Includes a thorough examination of multivariate inferential statistics, along with applying both univariate and multivariate post hoc procedures. Usage of a computerbased statistical software tool (Statistical Package for the Social Sciences) will be emphasized. Meets requirements for a Level V research tool course. Prerequisite: Level I, Level II, and Level III research tools or equivalent or permission by the course instructor.

General Course Information

Advanced Multivariate Statistics for Counseling is intended to provide graduate students with advanced training in multivariate statistical techniques and is approved by the Graduate School as a Level V research tool. The emphasis in this course will be upon understanding advanced statistical concepts and applying and interpreting tests of statistical inference. Content will include but not be limited to: multivariate model assumptions and multivariate inferential statistical procedures: MANOVA with univariate post hoc, MANOVA with multivariate post hoc, MANCOVA, profile analysis, doubly multivariate analysis of variance, hierarchical multiple regression, and meta-analysis. Computer software, 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. This access is available at the Metroplex Center and on the Commerce campus in certain computer labs.

Doctoral Student Learning Outcomes

Note. This course is absent of CACREP doctoral student learning outcomes, but has been approved by the graduate school as a level 5 research tool.

COURSE OBJECTIVES include, but are not limited to, the following:

- 1. Design and implementation of quantitative research methodologies and corresponding multivariate statistical analyses
- 2. Appropriate application and interpretation of multivariate inferential statistical tests
- 3. Assumptions underlying multivariate inferential statistical tests
- 4. Accurately developing APA style write-ups describing methodology and results from various multivariate statistical analyses
- 5. Application of statistical results to counseling and other human services

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

- I. Multivariate model assumptions
 - A. Multivariate normality
 - B. Homogeneity of variance and covariance
 - C. Linearity



- D. Multicollinearity and singularity
- E. Univariate and multivariate outliers
- **II. Statistical analyses: SPSS software application and interpretation**
 - A. MANOVA
 - B. MANCOVA
 - C. Profile analysis
 - D. Doubly multivariate analysis of variance
 - E. Hierarchical multiple regression
 - F. Meta-Analysis
- III. Presentation of multivariate results
 - A. APA 7th edition results section write-ups suitable for publication
 - B. Visual and statistical presentation of findings

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 and submitting assignments. You will need to utilize other technologies such as Microsoft Word, PowerPoint, SPSS, and so forth. 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 in-class assignments, coupled with experiential learning and practical application. 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 7th edition.
- 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. Two Application Assignments (100 points total; 50 points each application assignment): Two application assignments with be distributed in D2L throughout the semester (weeks 5 and 9). The purpose of an application assignment is to evaluate your knowledge and skill regarding research design, research questions, statistical concepts, inferential statistics, effect size interpretations, and so forth, and develop your interpretation and application skills to counseling. Application assignments may require you to critically evaluate a research scenario; identify various statistical procedures; develop your own research questions and scenario as it related to the particular design; complete tasks in SPSS; and provide practical implications for counseling. Both application assignments will be distributed two weeks prior to its due date. Feel free to use your classmates as a resource, but your work is your own and must be submitted independently in D2L. Submission of application assignments should be completed as a Word document following APA 7th edition guidelines (unless notified otherwise). The goal of application assignments is to demonstrate your knowledge and skill of various advanced statistical procedures and concepts discussed throughout this course.

Note. You may be asked to develop a result section write-up suitable for publication and/or include a PDF version of SPSS output as part of your response to application assignment questions.

In-class Presentation (100 points): Along with a partner, you will choose a statistical analysis covered in class (e.g., MANOVA, MANCOVA, profile analysis, doubly multivariate analysis of variance, hierarchal multiple regression) and apply it to a research project you create. The project must include (a) detailed overview of the chosen statistic; (b) research scenario, research design, research question, and instrumentation; (c) dataset fitting the constructed scenario; (d) demonstration of using the statistical procedure in SPSS, to include appropriate model assumptions; and (e) explanation of results and exploration of practical implications.

Please note that students will have to develop their own dataset and instrument/measure [dependent variable(s)] 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 methods and statistics, as well as test your ability to conceptualize how to apply your research findings to counselor practice. See rubric below.



In-Class Presentation Rubric

	1 – Does not meet	2 – Meets Expectation	3 – Exceeds Expectation
	Expectation	(16-17.9 points)	(18-20 points)
	(0-15.9 points)		
Detail overview	Description of	Description of statistic	Exceptional description
of chosen	statistic was	sufficient with only one	of statistic with no
statistic	insufficient or	or two incorrect	missing elements
(20 points)	incorrect, lacking	elements (some of the	(description provided
	depth, detail, and	description provided	reached beyond
	accuracy (description	reached beyond	information from
	provided did not	information from	textbook); examples
	reach beyond	textbook); description	provided were accurate
	information from	had depth and detail but	and communicated
	textbook); no	one or two elements	comprehension;
	examples were	missing/incorrect;	information had depth
	provided to evidence	evidence of knowledge	and detail; clear evidence
	comprehension; no	about statistic was	of knowledge about
	evidence of	communicated/	statistic was
	knowledge about	evidenced throughout	communicated/
	chosen statistic was	the presentation;	demonstrated/evidenced
	communicated/eviden	representative of	throughout the
	ced throughout the	doctoral level work	presentation;
	presentation; not		representative of doctoral
	representative of		level work
	doctoral level work		
Research	Research scenario,	Research scenario,	Research scenario,
scenario,	research design,	research design,	research design, research
research design,	research question,	research question, and	question, and
research	and/or	instrumentation were	instrumentation were
question,	instrumentation were	addressed/identified	addressed/identified with
instrumentation	not addressed/	and had depth and	attention to detail and
(20 points)	identified, poorly	detail but missing one	depth with no missing
	addressed, or lack	or two key elements;	key elements; clear
	depth and detail; no	rationale provided	rationale provided
	rationale provided	connecting scenario,	connecting scenario,
	connecting scenario,	research design, and/or	research design, and/or
	research design,	research questions to	research questions to one
	and/or research	one another but missing	another with no missing
	questions to one	one or two key	elements; clear evidence
	another; no evidence	elements; some	of comprehending
	of comprehending	evidence of	particular research
	particular research	comprehending	aesigns with constructing
	aesigns with	particular research	types of research
	constructing types of	aesigns with	questions; representative
	researcn questions;	constructing types of	of doctoral level work
	not representative of	research questions;	
	doctoral level work	representative of	
		doctoral level work	

The syllabus/schedule are subject to change.



Dataset fitting the constructed scenario (20 points)	Dataset was inappropriately designed/missing information or misaligns with the scenario, research design, and/or research question; dataset omits considerations of sample size, statistical power, and effect size; not representative of doctoral level work	Dataset was appropriately designed but missing one or two key elements; dataset aligns with the scenario, research design, and research question but missing one to two key elements; dataset attends to considerations of sample size, statistical power, and effect size; not representative of doctoral level work	Dataset was detailed, well- designed with no missing detail; dataset clearly aligned with the scenario, research design, and research question with no missing detail; dataset clearly attended to considerations of sample size, statistical power, and effect size; not representative of doctoral level work
Demonstration of using the statistical procedure in SPSS, to include appropriate model assumptions (20 points)	Demonstration was poorly executed, misleading, or incorrect; demonstration was not relevant to the chosen statistic, design, and research question; demonstration lacked depth and detail; no evidence of knowledge about the statistic was communicated/ evidenced during SPSS demonstration; not representative of doctoral level work	Demonstration was properly executed but missing one or two key elements; demonstration was relevant to the chosen statistic, design, and research question but missing one or two key elements; demonstration had depth and detail but missing one or two key elements; evidence of knowledge about the statistic was communicated/ evidenced during demonstration; representative of doctoral level work	Demonstration was properly executed with great precision and accuracy with no missing detail; demonstration was highly relevant to the chosen statistic, design, and research question; demonstration had exceptional depth and detail with no missing detail; clear evidence of knowledge statistic was communicated/evidenced during demonstration; representative of doctoral level work
	1 – Does not meet Expectation (0-7.9 points)	2 – Meets Expectation (8-9.9 points)	3 – Exceeds Expectation (9- 10 points)
Explanation of results and exploration of practical implications (10 points)	No communication of results or results were irrelevant/incorrect with chosen statistic; absence of a practical discussion of findings or practical discussion was highly	Communication of results was evident and corresponded to chosen statistic but missing one or two key elements; practical discussion of findings was evident but missing one or two	Communication of results was clearly evident and corresponded to chosen statistic with no missing detail; practical discussion of findings was clearly evident with no missing detail;

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	underdeveloped; no practical applications to counseling or human service shared (implications); not representative of doctoral level work	key elements; practical applications to counseling or human service (implications) was evident but missing one or two key elements; representative of doctoral level work	practical applications to counseling or human service (implications) was clearly evident with no missing detail; representative of doctoral level work
Presentation and	Approval of topic not	Approval of topic was	Approval of topic was
Presenter	confirmed;	confirmed; presentation	confirmed; presentation
Qualities	presentation occurred	occurred within the	occurred within the
(10 points)	outside the allotted	allotted timeframe.	allotted timeframe;
	timeframe;	Information appeared	information was well-
	information appeared	fairly organized, but	organized with no
	disorganized/	missed one or two key	missing detail; presenters
	disjointed; presenters	elements; presenters	appeared rehearsed;
	appeared unrehearsed	appeared rehearsed at	presentation material(s)
	and presentation was	times, but missed one	were aesthetically
	unpolished;	or two key elements;	pleasing; presentation
	presentation quality	presentation quality	quality was appropriate
	was inappropriate for	was acceptable for	for doctoral level work;
	doctoral level work;	doctoral level work;	presenters seemed
	presenters were not	presenters seemed	Invested and eutnanistic
	Invested or	Invested and eutnanistic	about the topic and
	euthanistic about the	about the topic and	throughout the
	topic or presentation	throughout the	of the time. O or more
	(no evidence during	of the time: 5 9	scholarly sources were
	than 2 scholarly	or the time, 3-0	utilized
	chair 5 Scholarly	scholarly sources were	utilizeu
	sources were utilized	utilizea	

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 Application Assignment (2 total) In-class Presentation Point Value 100 100



Total

200

Total points possible = 200. Your Final Grade is determined adding the point values earned from each assignment and then dividing by 200. The resulting value is multiplied by 100 to yield a percentage. For example: (170 [points earned]/200) X 100 = 87.5%

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, up to a maximum of three days. After three (3) days past the initial due date, the assignment will no longer be accepted.

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.

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A

Desktop Support



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

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	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
 - o 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: <u>https://support.youseeu.com/hc/en-</u> us/articles/115007031107-Basic-System-Requirements
- You must have a:
 - o Sound card, which is usually integrated into your desktop or laptop computer
 - Speakers or headphones.
 - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: JAVA web site http://www.java.com/en/download/manual.jsp
- 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 <u>helpdesk@tamuc.edu</u>.



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

[Example]

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.

Summer 2019 The syllabus/schedule are subject to change.



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>.

http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as

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

TAMUC Attendance

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

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

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13stude nts/academic/13.99.99.R0.01.pdf

Academic Integrity

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

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13stude nts/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

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

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ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce Gee Library- Room 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 Email: <u>studentdisabilityservices@tamuc.edu</u> Website: <u>Office of Student Disability Resources and Services</u> 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</u> <u>Handguns On Campus</u> document and/or consult your event organizer.

Web url:

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.

Date	Торіс	Readings	Assignments		
Week	-Introductions,	-Field (2018) Chapters 1: Introduction to			
1	Course Overview and	statistics (Basic Concepts)			
	Expectations	-Field (2018) Chapters 2: The SPINE of			
	-Review of basic	statistics			
	statistical concepts	-Field (2018) Chapter 3: The phoenix of			
	(e.g., NHST, model	statistics			
	assumptions, effect	-Field (2018) Chapter 4: IBM SPSS			
	size, confidence	Statistics environment			
	intervals, SPSS	-Field (2018) Chapter 5: Exploring data			
	environmental,	with graphs			
	graphs, etc.)	-Field (2018) Chapter 6: The beast of			
		bias			
		-Watson et al. (2016) Calculating and			
		reporting estimates of effect size in			
		counseling outcome research			
Week	-MANOVA, with	-Field (2018) Chapters 17: MANOVA			
2	univariate and	-Giordano et al. (2020) Withdrawal			
	multivariate post-hoc	symptoms among American			
	test	(MANOVA with discriminate analysis			
		post hoc)			
		-Schmit et al. (2019) Gender differences			
		of client (MANOVA with			
		discriminate analysis post hoc example)			
Week	-MANCOVA, with	-Field (2018) Chapters 13: Comparing			
3	univariate post hoc	means adjusted for other predictors			
	tests	(analysis of covariance)			
		-Field (2018) Chapters 17: MANOVA			
		-Schmit et al (2020) A holistic client			
		functioning profile comparison of			
		persons with serious mental illness			
		(Covariate Analysis example)			
Week	-Introduction to	-Schmit et al. (2018) Using profile			
4	Profile Analysis	analysis in counseling outcome research			
	-	(How to Article)			
Week	-Profile Analysis	-Schmit et al. (2018) Examining the	Application		
5	Cont.	effectiveness of integrated behavioral and	Assignment 1		
		primary healthcare treatment (Profile	due (submit in		
		Analysis)	D2L)		

COURSE OUTLINE / CALENDAR



		-Schmit et al (2020) A holistic client	
		functioning profile comparison of	
		persons with serious mental illness	
		(Covariate Analysis example)	
Week	-Introduction to	-core.ecu.edu/psyc/wuenschk/MV/RM-	
6	Doubly Multivariate	ANOVA/DMRM.doc	
	Analysis of Variance	-	
		https://www.ibm.com/support/knowledge	
		center/SSLVMB_24.0.0/spss/tutorials/gl	
		<u>mr_diet_intro.ntmi</u>	
		http://claudiaflowers.net/rsch8140/Doubl	
		<u>yExample.htm</u>	
Week	-Doubly Multivariate	-core.ecu.edu/psyc/wuenschk/MV/RM-	
7	Analysis of Variance	ANOVA/DMRM.doc	
	Continued	-	
		https://www.ibm.com/support/knowledge	
		center/SSLVMB_24.0.0/spss/tutorials/gl	
		mr_diet_intro.html	
		http://claudiaflowers.net/rsch8140/Doubl	
	I l'ananah ta al	<u>yExample.ntm</u>	
Week	-Hierarchical	-Field (2018) Chapters 9: Linear Model	
ð	Multiple Regression	(Regression)	
		-Giordano & Cecii (2014) Religious	
		coping, spirituality, and nypersexual	
		(Hierarchical multiple Regression	
		Analysis example)	
Week	-Meta-Analysis	-https://www.meta-	Application
9	-	analysis.com/pages/why_do.php	Assignment 2
		-	due (submit in
		https://himmelfarb.gwu.edu/tutorials/stud	D2L)
		ydesign101/metaanalyses.cfm	
		Schmit et al. (2016) Meta-analysis of	
		solution-focused brief therapy for	
		treating symptoms of internalizing	
		disorders (Meta-Analysis example)	
Week	In-Class	In-Class Presentations	In-Class
10	Presentations		Presentations
			(submit link to
			presentation in
			D2L)