Research Design and Statistics II

PSYC 3443-001— Fall 2021 — August 25th – December 15th Monday/Wednesday 2:30 - 3:50PM University Hall 011

Instructor: Dr. Scott Coleman

Email: Use Canvas email system for course correspondence.

Office Number: Life Science 415

Office Hours: MW 11:00 a.m. – 12 noon in person. Via Teams. Or by appointment.

Course Description and Goals: This course provides theoretical and practical approaches to research methodology, statistical analyses, and reporting of research. In this course, you will learn a variety of methods and procedures commonly used to conduct psychological research. You will also learn how to analyze data appropriately and how to communicate the research results to the scientific community. Research design and statistics will be an integral part of your experience as you progress through your major and a necessary tool you will use when you become professionals in the field of psychology. This is an intense course with multiple projects both in and out of class. You must be prepared to take on an intensive course load in order to do well in this class. Prerequisites: PSYC 2443.

Format: The course will be a face-to-face format, bu. You will need to attend online sessions at the scheduled day and time. Live lectures will be recorded and posted for review. *Note:* You are registered for one (1) section of lab. However, you have the flexibility to attend any of the lab sections for the week if an unexpected conflict arises (e.g., others at home competing for Wi-Fi, caretaking duties, etc.). All lab sections will have the same due dates and times.

Required Text and Course Materials (aside from the lab manual, these texts were also used in PSYC 2443):

- Gravetter, F.J., & Wallnau, L.B. (2017). Essentials of Statistics for the Behavioral Sciences (9th ed.). Belmont, CA: Wadsworth. Cengage. ISBN: 978-1-3370-9812-0
- McBride, D.M. (2019). The Process of Research in Psychology (4th ed.). Thousand Oaks, CA: Sage. ISBN: 978-1-5443-2349-7
- 3. Publication Manual of the American Psychological Association (7th edition). Washington, D.C.: American Psychological Association. ISBN: 978-1-4338-3215-4
- 4. Departmental Lab Manual. **ISBN: 978-1-64617-106-4** (only available at UTA those provided off campus may be copied illegally and thus not approved for this course)
- 5. A calculator with statistical functions (programmable calculators and cell phones will not be permitted)
- 6. Optional Resources:
 - APA Formatting: www.apastyle.org
 - Publishers' websites: for workshops at: https://edge.sagepub.com and www.cengagebrain.com
 - Statistics Tutoring and Supplemental Instruction: see Canvas announcement

Technology Requirements:

- **Note:** This course may be computer/internet intensive. You will need a personal device (desktop, laptop, smartphone, tablet, etc.) or access to a UT Arlington computer lab so you can access Canvas and Echo360 regularly and participate in class effectively. If you do not own a computer, please make arrangements to rent one through the UTA library or to access and use the computers available to you on campus during lab and lecture times.
- You will need access to Canvas, Microsoft Teams, Echo360, Microsoft Office (e.g., Word, Excel, Teams), and SPSS (all available with your UTA account).

- Canvas will be an important resource throughout the semester, so you will need to be proficient in the
 use of Canvas to perform well. Your assignments, grades, and supplemental readings will be posted
 through Canvas. Make sure you have access to Canvas.
 - Canvas support is available 24/7 by calling 1-855-597-3401 or by clicking on the "?" icon on your Canvas Dashboard.
- Access to a computer with a webcam and SPSS statistical software. Webcams will be used with
 Respondus Lockdown Browser. SPSS, the statistical software, is available for free for all students
 enrolled at the University of Texas at Arlington through OIT and compatible with PC and Mac operating
 systems. Additionally, computers are available in the OIT Labs, library computers, and on most
 Departmental desktops (see UTA.edu for hours of operation). SPSS will be used in the lecture and lab
 and is required to complete assignments in this course.

Microsoft Teams: During the "temporary classroom density reduction period", students will participate in the course like a face-to-face course via Microsoft Teams. You will need to attend online lecture and lab sessions at the scheduled day and time. There will be a Microsoft Team for lecture and your assigned lab. There will be separate channels within these Microsoft Teams for group work, lecture recordings etc. Recording of lecture and labs will be posted in these channels for reference. In-person lecture will resume after September 8th; however, some course interactions on Teams may continue.

Echo360: Lectures this semester will be recorded on Echo 360 the Echo360 software available for free through the University of Texas at Arlington

Course Structure

This course includes a lecture portion that will focus on the development of your conceptual understanding and background knowledge of research design and statistical analyses and a lab portion that will focus on the development of your research and statistical skills. The course is divided into 3 modules and exams are given at the end of each module in lecture (multiple choice) and in lab (word problems). The third lab exam is a comprehensive final exam.

Learning Objectives for Module I (Week 1 – Week 6):

- Explain between- and within-subjects designs and compute the appropriate t statistic for each.
- Describe various types of confounds and the means for controlling or minimizing effects of confounds.
- Differentiate between experimenter effects and participant effects and how the design of experiments relates to these concepts.

Learning Objectives for Module 2 (Week 7 - Week 11):

- Explain the costs and benefits of using designs with more than 2 levels of an independent variable.
- Identify designs that use ANOVA, compute one-way randomized and repeated measures ANOVA and interpret results.
- Describe effect size and compute and interpret Cohen's *d*.
- Describe statistical techniques for planned and post hoc comparisons
- Compute Tukey's post hoc test and interpret results.

Learning Objectives for Module 3: (Week 12 – Week 16):

- Review surveys and sampling methods.
- Explain what quasi designs are and when and how they are used.

- Review case studies and their value for psychology.
- Identify the elements of presenting data in different media and compare components to the manuscript.
- Understand and experience the basics of conference presenting and poster composition and data presentation.

Lab Information

Please note it is your responsibility to attend the specific lab section you are enrolled in this semester. The dates listed on the **Lab Schedule** are when each assignment is due for all lab sections, which, unless otherwise noted, is at 11:59PM.

Teaching Assistants and Corresponding Lab Sections — Labs and Office Hours meet in Microsoft Teams					
Section Time		TA	Email (@mavs.uta.edu)	Office Hours	
002	Th 5:30PM-7:20PM	Sakinat Izuagbe	sakinat.izuagbe@mavs.uta.edu	TBA	
003	F 11:00AM-12:50PM	Kaitlin Killian	kaitlin.killian@mavs.uta.edu	TBA	
004	F 1:00PM-2:50PM	Julieta Trejo	julieta.trejo@mavs.uta.edu	TBA	
005	W 4:00PM-5:50PM	Otto Wilkinson	obw0535@mavs.uta.edu	TBA	
Manuscript Grader/Coordinator		Houda Chamseddine	houda.chamseddine@mavs.uta.edu		

Formatted Table

Commented [EA1]: Friday 11- 1PM

Course Components

Lecture			
Assignment	Point Total		
Lecture Exams (3 – 50 pts)	150 Points		
Lab Exams (3 – 50 pts)	150 Points		
Lecture extra-credit	5 points		
Total Lecture	305 Points		

Lab				
Assignment	Point Total			
Manuscript Assignments (2)	80 Points			
Poster Assignments (3)	60 Points			
In-Class Assignments (8)	80 Points			
Homework Assignments (8)	80 points			
Extra Credit	5 points			
Total Lab:	305 Points			

Note: You must receive a passing grade in both lecture and lab to pass this course. A passing grade is considered a "C" or 70% which is 210 points in lecture out of 300 and 216 points out of 305 in lab. For example, earning 210 points in lecture, but failing to do so in lecture will result in a final grade of a D.

Lecture Exams (50 pts each): There will be three lecture exams given throughout the semester administered in class. Each lecture exam will be worth 50 points and will consist of 50 multiple-choice questions. Lecture exams will be open for 15 hours and you will have 1 hour and 20 minutes to take the exam during that window. See the **Lecture Schedule** for exam dates. Exam questions will be taken from class lectures, activities, and assigned readings.

Lab Exams (50 pts each): There will be three lab exams given throughout the semester administered in-class. Each lab exam will be worth 50 points and will consist of short answer questions and practical statistical exercises. See the **Lab Schedule** for exam dates. Exam questions will be taken from class lectures, activities, inclass assignments, and homework.

Note: Make-up lecture and lab exams will be given at the discretion of your professor (see the **Make-Up Work** policy for more information). Please allot enough time to study for and take the exam prior to the end of the period – do NOT wait until the last hour. If you do not take an exam, it will be considered a missed exam, and you will receive a grade of zero (0). I will not reset exams for any reason within 1 hour of the deadline for the exams, and I will not reset an entire exam if you have completed most of the items.

Lecture Schedule of assigned class topics is provided below. I expect you to be prepared with knowledge of the topic(s) indicated on the schedule. Therefore, I expect that all students will have read and reviewed the assigned material prior to participating in lecture. In the slide decks, I will ask questions to test your knowledge on the topics that will be related to the information and supporting resources that I will include in the lecture. You must answer all questions (you must open the slide deck and answer the questions within the deck). Lecture participation grades will be determined using the Echo360 system and will be displayed as a percentage (i.e., 0% to 100% for activity participation or answering questions). The lectures, slide decks, and questions will open for 24 hours; therefore, if you miss lecture you can review the recording and lecture and answer the participation questions within the 24-hour period to receive 100% credit (note that posting of the lecture video may be delayed due to computer processing time). The final Lecture Participation grade will equal the average of all daily lecture participation grades (i.e., the average percentage) multiplied by 10 to calculate to final Lecture Participation points.

Manuscript Assignments (80 pts total): In lab, you will complete a semester research project and write an APA-formatted manuscript. The manuscript is divided into two separate assignments. Manuscript Assignment #1 will cover the title, abstract, introduction, methods, results, discussion, references, appropriate figure/tables and is worth 50 points. Manuscript Assignment #2 will consist of a final draft that addresses previous feedback and is worth 30 points. Manuscript Assignments will be due at 11:59PM throughout the semester. See the Lab Schedule for due dates.

Poster Project (60 pts): In lab, you and your group will create and present a scientific research poster based on the semester research project. Each group member will be responsible for testing a specific hypothesis. As a team, you will design the poster in steps and include each of your hypotheses within the document to be presented. The poster project is <u>divided</u> into three separate assignments. Poster Portion #1 covers the title, introduction, method, and references sections and is worth 15 points. Poster Portion #2 covers the results and discussion sections and is worth 15 points. Poster Portion #3 consists of the Poster Presentation which has both a group and individual component and is worth 30 points. See the **Lab Schedule** for Poster Portion #1 and #2 due dates and presentation day for Poster Portion #3.

In-Class Assignments (ICAs; 10 pts each; 80pts total): During lab, ICAs (and the Homework assignments below) are your opportunity to learn the practical skills needed in order to be successful in Research Design & Statistic II as well as in other upper-level psychology courses. These assignments will help you develop your skills as a scientific writer and test your understanding of the concepts covered in the course. ICAs should be completed during lab, but you will have additional time to complete the assignment if you need it after lab. For the first two weeks of class, you will have unlimited attempts to submit correct answers for the ICAs on Canvas until the submission closes on Friday at 11:59 PM. For the remainder of the course, ICAs should be completed and turned in by the end of your lab period. If you miss all of the lab sections for the week, you will not be able to make up missed ICAs and will receive a zero (0).

Homework Assignments (10 pts each; 80pts total): For the first two weeks of lab, homework assignment submission pages will open a week before the due date, and you will only have one attempt to submit your answers for assignments via canvas. The homework assignments are designed so that you will work out the problems in advance, then fill in answers on Canvas thereby providing you with immediate feedback regarding

your performance. Assignments are due on the dates noted on the **Lab Schedule**. For the remainder of the course, homework assignments should be turned in at the beginning of your lab period. If you miss completing and/or submitting the homework assignment for the week, you will not be able to make up the missed homework assignment and will receive a zero (0).

Lab Attendance (10 points): Lab attendance and participation is mandatory and will be assessed each week by you TAs. You must be present for at least 85% of the lab time and interact with your peers and your TA to in order to receive credit (see the Lab Schedule). Daily lab attendance will be recorded as absent, present, present and participated (0% for absent, 75% for present, or 100% for present and participated). The final Lab Attendance grade will equal the average of all daily lab attendance grades (i.e., the average percentage) multiplied by 10 to calculate to final Lab Attendance points.

Note: The poster project is a group project and will require you to regularly meet with your group members during your scheduled lab time. During lab time, we request that you make an effort to interact with the TA, asking questions and receiving feedback. They are there to help lab be a time for you to engage in active, hands on learning. If you are struggling with a question, someone else is as well and if you reach out to your TA for additional assistance, you may improve your learning outcomes as well as someone else's.

Lab Extra credit: There is a 5-point extra credit opportunity for lab. We are going to spend the semester discussing research methods and techniques for analyzing research hypotheses. Therefore, you have the option to reflect on the research process through the eyes of a research participant. You may receive up to 5 extra credit points if you participate as a research participant in the Department of Psychology's Participant Pool (SONA). You may participate in additional research voluntarily. To gain these Extra Credit points you MUST be enrolled in SONA. Details are available on the psychology website at http://www.uta.edu/psychology/. Also, you may not use the same experiment for SONA credits in more than one course at a time.

Grading and Evaluation: Final grades will be assigned based on the following points:

Points	Percentage	Letter Grade
549-610	100 – 90.0%	Α
488-548	80.0 - 89.9%	В
427-497	70.0- 79.9%	С
366-426	60.0-69.9%	D
<365	< 59.9%	F

Grades: Grading is based on a mastery model. Students are expected to keep track of their performance throughout the semester and seek guidance from available sources. *I make it a policy not to "bump" any final grade up to the next higher grade.* Please do not ask me to do otherwise. If you want a specific grade, then you need to put in the effort necessary to obtain said grade.

Course Policies and Important Things to Know

Email: Official communication from UTA to you will come only through your UTA e-mail box. UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information

about activating and using MavMail is available at OIT: Student MavMail. Please access it regularly, or forward it to your current email address, as your success in college may depend on your ability to respond quickly.

I will communicate with you using Canvas email. To contact me by Canvas email, go to your Canvas inbox (left hand side of Canvas homepage), open a new message, select this course, and then select my name. Using Canvas email will allow me to know which section and group you are enrolled in and I can respond to your question or concern sooner. In fact, emails sent from Canvas are given priority over all other emails even those sent through non-Canvas MyMav accounts. We will not answer emails sent from personal (non-MyMav) accounts since these are not secure.

I am generally good at responding to student e-mails within 24 hours. If you do not hear from me within 48 hours of your initial correspondence, please feel free to send me a reminder Canvas email. Please keep in mind that I do not answer emails after 6PM (Central Time). I will respond to emails sent after 6PM the following day. If you need assistance or have a question about an assignment, please plan accordingly and ask for help sooner rather than later. It is not guaranteed that I will be available to respond to emails sent within 5 hours of the deadline for any assignment. I do want to help you and answer any questions you may have, so please send your questions to me well ahead of the deadline so I can assist you.

Please keep in mind that I will not respond to your email if it relates to the following:

- Questions regarding information that can be found on the syllabus
- Information that can be found on Canvas or in a Canvas Course announcement
- Asking for more points to be added to your grade or to have your grade bumped to the next letter grade

Expectations for Out of Class Study: Workload for this course is intensive and requires significant effort in and out of class. Each week we will cover 1 to 3 chapters' worth of material. It is your responsibility to keep up with course readings, assignments, and due dates. A general rule of thumb for college course is that for every credit hour earned, you should spend 3 hours per week working outside of class time. A 3-credit course would have the minimum expectation of 9 hours of reading, studying, and working on assignments outside of class time. It is your responsibility to manage your time and workload appropriately and schedule time each week for reading and studying in this course. Students who succeeded in this class have set up designated times outside of class dedicated to reading and completing coursework. Generally, successful students managed their time wisely and take advantage of the resources offered to them including meeting with the professor, TAs, Statistic Tutors, and attending Supplemental Instruction sessions.

Make-Up Work: Lecture attendance is required, and lab attendance is mandatory. No make-up opportunities for lab assignments, lab exams, and lecture exams will be given unless documentation is received for a University-approved absence and arrangements are made with me *prior* to your absence. Requests to make-up work for any other reason that does not fall under university excused absences such as a serious medical emergency or other extenuating circumstances will be evaluated on a case by case basis after documentation is received and are at the discretion of faculty approval. You must make-up missed work within 5 working days. Students who miss a class meeting(s) for any reason or miss portions of classes due to tardiness or early departure will still be held accountable for all of the material that is covered during those sessions, including materials presented in lecture that are not in the book. If you miss a class, find a classmate (or two) with whom you can share resources. Please do not email me to ask what materials you missed in class. Material covered in class is your responsibility.

Protocol for missing a lab day (including exams): Email your Lab TA and copy Dr. Coleman on the e-mail. Explain the situation and provide documentation at that time if available. Any communication regarding missed class periods must be documented via e-mail and approval will be decided by Dr. Coleman.

Protocol for missing lecture exams: Email Dr. Coleman via Canvas and explain the situation. Provide documentation at that time if available. Any communication regarding missed lecture exams must be documented via e-mail and approval will be decided by Dr. Coleman.

Late Work: Five points per day (i.e. each 24-hour period) will be deducted from your final score for any project (manuscript and poster assignments) that is received late. Please be sure to check the **Lecture Schedule** and **Lab Schedule** for all due dates. ICAs and Homework assignments are not accepted late.

Correct Files: Students are responsible for submitting the correct, complete, and viable file(s) with the correct assignments. Files that are submitted to the wrong assignment or assignments that are submitted with an incorrect, incomplete, or corrupt file can be replaced with corrected files only if the correction is made prior to the original due date and time. Corrected files or submissions that occur after the original due date will be considered late (see Late Work policy). Students are strongly encouraged to submit assignments in advance of the due time, then log out of Canvas, log back in and check that the assignment was successfully submitted, that the file is not corrupt, is the correct file, is complete, and is attached to the correct assignment.

Technological Difficulties: Given the online nature of this course, technological issues are possible. However, technological difficulties (Wi-Fi connectivity issues, browser issues, computer problems etc.) are not a valid reason to ask for an extension or ask that the work not be considered late (see **Late Work** policy). It is your responsibility to make sure you have access to a computer, the course assignments, and reliable Wi-Fi. Further, it is also your responsibility to give yourself enough time before the deadline to deal with any technological difficulties that may arise.

If you experience any problems with Canvas, Canvas Help is the best resource to contact for help. Canvas Help is available on your Canvas Dashboard menu as indicated by the "?" icon. Keep in mind that Canvas records the time and date each student visits any page on Canvas but it does not record specific error messages students may receive. The more information you can provide Student Tech with the situation in which you encountered the problem, including any error messages you received, the more able they will be to help you.

Cheating and Plagiarism Course Policy: Any student who engages in academic misconduct including cheating and plagiarism on any assignment, quiz, or exam will receive a grade of "F" for the entire course. No exceptions. It is the responsibility of the student to understand what plagiarism is, how to avoid it, and how to properly cite your sources. Additional information is available at Student Conduct. Any work presented using previous assignments from other classes/projects is considered academic dishonesty and will not be accepted as gradable material. If you are caught plagiarizing, you will receive a grade of "F" for the entire course. Similarly, if you are caught cheating on an exam, you will receive a grade of "F" for the entire course.

Anti-Plagiarism Software: Any written assignment that you complete in this course will be processed using the anti-plagiarism software. This software is integrated with Canvas and will give you a similarity score for your assignments that will be visible to both you and your professor. If there are instances where your writing is similar to, or matches against, a source within the database, it will be flag for your professor to review. If you are caught plagiarizing, you will receive a grade of "F" for the entire course. If in doubt, ask your TA to look at your work and the sources that you are citing from before you hand in an assignment.

University of Texas at Arlington Institutional Policies

UTA students are encouraged to review the below institutional policies and informational sections and reach out to the specific office with any questions. To view this institutional information, please visit the Institutional Information page (https://resources.uta.edu/provost/course-related-info/institutional-policies.php) which includes the following policies among others:

- Drop Policy
- Disability Accommodations
- Non-Discrimination Policy
- Title IX Policy
- Academic Integrity
- Student Feedback Survey
- Final Exam Schedule
- Counseling and Psychological Services (CAPS)
- Student Support Services

Face Covering Policy:

While the use of face coverings on campus is no longer mandatory, all students and instructional staff are strongly encouraged to wear face coverings while they are on campus. This is particularly true inside buildings and within classrooms and labs where social distancing is not possible due to limited space. If a student needs an accommodation to ensure social distancing in the classroom due to being at high risk they are encouraged to work directly with the Student Access and Resource Center to assist in these accommodations. If students need masks, they may obtain them at the Central Library, the E.H. Hereford University Center's front desk or in their department.

Attendance: At the University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, note that you should be aware that we can track your progress in Canvas—in fact, we can see each page you accessed and the time when that occurred. As the instructor of this section, Lecture attendance is required, and lab attendance is mandatory. However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients "begin attendance in a course." UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report must the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Canvas. This date is reported to the Department of Education for federal financial aid recipients.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring by appointment, drop-in tutoring, etutoring, supplemental instruction, mentoring (time management, study skills, etc.), success coaching, TRIO Student Support Services, and student success workshops. For additional information, please email resources@uta.edu, or view the Maverick Resources website.

University Tutorial & Supplemental Instruction (Ransom Hall 205): UTSI offers a variety of academic support services for undergraduate students, including: 60 minute one-on-one tutoring sessions, Start Strong

Freshman tutoring program, and Supplemental Instruction. Office hours are Monday-Friday 8:00am-5:00pm. For more information visit www.uta.edu/utsi or call 817-272-2617.

The IDEAS Center: (https://www.uta.edu/ideas/) (2nd Floor of Central Library) offers FREE <u>tutoring</u> and <u>mentoring</u> to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. Students can drop in or check the schedule of available peer tutors at www.uta.edu/IDEAS, or call (817) 272-6593.

The English Writing Center (411LIBR): The Writing Center offers FREE tutoring in 15-, 30-, 45-, and 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Register and make appointments online at the Writing Center (https://uta.mywconline.com). Classroom visits, workshops, and specialized services for graduate students and faculty are also available. Please see Writing Center: OWL for detailed information on all our programs and services.

Library: The Library's 2nd floor <u>Academic Plaza</u> (http://library.uta.edu/academic-plaza) offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the <u>library's hours</u> of operation.

Librarian to Contact: Andy Herzog (amherzog@uta.edu)

Research or General Library Help:

Ask for Help

- Academic Plaza Consultation Services (library.uta.edu/academic-plaza)
- Ask Us (ask.uta.edu/)
- Research Coaches (http://libguides.uta.edu/researchcoach)

Resources

- <u>Library Tutorials</u> (library.uta.edu/how-to)
- Subject and Course Research Guides (libguides.uta.edu)
- <u>Librarians by Subject</u> (library.uta.edu/subject-librarians)
- A to Z List of Library Databases (libguides.uta.edu/az.php)
- <u>Course Reserves</u> (https://uta.summon.serialssolutions.com/#!/course_reserves)
- <u>Study Room Reservations (openroom.uta.edu/)</u>

Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911.

Lecture Schedule

Week	Date	Lecture Topic	Assigned Reading			
		Module 1				
1	W 8/25	PSYC 3443 Course Overview	McBride Chapter 5 pgs. 117-120 & Chapter 13			
	M 8/30	PSYC 2443 Course Review	Gravetter & Wallnau Chapters: 4, 5, 7, & 8			
2	W 9/01	Introduction to the t-statistic: Single	Gravetter & Wallnau Ch. 9			
	VV 9/01	Sample t-test				
3	M 9/06	Labor Day				
,	W 9/08	Between-subjects design	McBride Chapter 12			
	M 9/13	Validity, control, and confounds	McBride Chapter 5 pgs. 121-135;			
4	101 3/ 13		On Canvas: Jackson Chapter 9 pgs. 225-238			
	W 9/15	Independent Samples t-test	Gravetter & Wallnau Ch. 10			
		Within-subjects design	McBride Chapter 12;			
	M 9/20		Gravetter & Wallnau Ch. 11;			
5			On Canvas: Jackson Chapter 9 pgs. 238-244			
	W 9/22	Related/Dependent Samples t-test	Gravetter & Wallnau Ch. 11			
	•	Review for Exam 1				
6	M 9/27	Exam 1: Part 1-Multiple Choice				
	W 9/29	Logic of Analysis of Variance (ANOVA)	Gravetter & Wallnau Ch. 4 & 12			
		Module 2				
7	M 10/04	Logic of Analysis of Variance (ANOVA)	Gravetter & Wallnau Ch. 4 & 12			
-	W 10/06	One-way between-subjects ANOVA	Gravetter & Wallnau Ch. 12			
_	M 10/11	Planned & Post Hoc Comparisons Effect	Gravetter & Wallnau Ch. 12			
8	,	size				
	W 10/13	Two-way ANOVA/ Factorial designs	McBride Chapter 13			
9	M 10/18	One-way repeated-measures ANOVA	Gravetter & Wallnau Ch. 13			
	W 10/20	Interpreting ANOVA matrices and graphs	McBride Chapter 13			
10	M 10/25	ANOVA Practice				
	W 10/27	Group Poster Project Workday—No Class				
11	M 11/01	Review for Exam 2				
	W 11/03	Exam 2: Part 1-Multiple Choice				
	111/00	Module 3	14 B : G			
	M 11/08	Surveys and Sampling	McBride Chapter 4 pgs. 86-89; Chapters 6 & 10			
12	W 11/10	Quasi Designs, Developmental Designs,	McBride Chapters 14 & 15			
	111111	Analysis of Quasi designs	AA-D da Charles A and OF O7			
	M 11/15	Case Studies	McBride Chapter 4 pgs. 95-97;			
13	W 11/17	Professional Development/ Majoring in	Canvas Handout			
	NA 14 /22	Psychology and Future Graduate Study				
14	M 11/22	Careers in Psychology	2 4th La Nia and La 2 6th			
45	W 11/24	Thanksgiving Holiday No Classes: November	er 24" to November 26"			
15	M 11/29	Review for Exam 3				
	W 12/01	Exam 3: Part 1-Multiple Choice				

Lab Schedule

Lab	Date	Lab Topic	Lab Exercise	Assignment Due	
Modu	ıle 1				
1	8/25	Review APA Formatting, Discuss Manuscript and Poster Project	ICA #1: z-test and Library Resources Due August 27 th at 11:59 PM on Canvas		
2	9/1	Single Sample <i>t</i> -test	ICA #2: Single-sample <i>t</i> -test Due September 6th at 11:59 on canvas	Assignment #1: z-test, Library Resources, and APA format Due September 6th at 11:59 on canvas	
3	9/8	Poster Project Workday	Form groups, choose hypotheses, work on Poster Portion #1	Assignment #2: Single- sample <i>t</i> -test Poster Portion #1	
4	9/15	Independent Samples t-test	ICA #3: Independent samples <i>t</i> -test		
5	9/22	Dependent Samples <i>t</i> -test Exam 1 Review	ICA #4: Dependent <i>t</i> -test	Assignment #3: Independent samples <i>t</i> -test	
6	9/29	Exam 1 Part 2-Word Problems		Assignment #4: Dependent samples t-test	
		Exam 1: Part 2-Word Problems			
Modu	ıle 2				
7	10/6	One-way Between-Subjects ANOVA	ICA #5: One-Way Randomized ANOVA	Data Collection Due	
8	10/13	Factorial ANOVA Manuscript Project Workday	ICA #6: Factorial ANOVA	Assignment #5: One-Way Randomized ANOVA	
9	10/20	One-way Repeated Measures ANOVA	ICA #7: One-Way Repeated Measures ANOVA	Assignment #6: Factorial ANOVAs Manuscript Assignment #1	
10	10/27	Poster Project Workday Exam 2 Review	Data analysis, report results, work on Poster Portion #2	Assignment #7: Repeated Measures ANOVA Poster Portion #2	
11	11/3	Exam 2: Part 2-Word Proble	ms		
Modu	ıle 3				
12	11/10	SPSS Workshop	ICA #8: SPSS Workshop		
13	11/17	Poster Presentations	Poster Portion #3: Group Presentations in Lab	Assignment #8: Surveys	
14	11/24		asses: November 24th to Novem		
15	12/01	Exam 3 Review; Manuscript	Assignment #2: Final Draft is o	lue on Canvas at 11:59PM	
16	12/8	Exam 3: Part 2-Word Proble 30]	ms [Available on Canvas 3:50P	M April 28 — 11:59PM, April	