Research Methods in Psychology

PSYC 3300 – Fall 2023 – Aug 21st – Dec 5th Lecture: Tuesday/Thursday 9:30 AM – 10:50 AM- SH 121

Instructor Information

Instructor(s) Dr. Amandeep Dhaliwal

Office Number Life Science 519

Email Address <u>Amandeep.dhaliwal@uta.edu</u> Official communication from UTA to you will come only through your UTA e-mail box.

Faculty Profile https://www.uta.edu/academics/faculty/profile?username=dhaliwalas

Office Hours Monday/Wednesday 11am-12 pm.

Course Information

Section Information PSYC 3300-001 (90841)

Time and Place of Class Meetings Tuesday / Thursday 9:30 AM – 10:50 AM. Science Hall (SH-121)

Description of Course Content

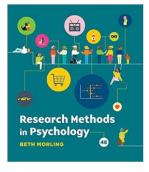
This course covers experimental designs and research methodologies commonly used in the field of psychology. It includes strategies for identifying meaningful hypothesis, conducting literature reviews, implementing research practices, and interpreting and evaluating statistical conclusions and empirical research findings. Challenges related to sociocultural factors will also be analyzed.

Student Learning Outcomes

- 1. Students will demonstrate an understanding of the fundamental principles of research design, including the formulation of research questions, hypotheses, and operational definitions.
- 2. Students will be able to identify and critically evaluate different research methodologies commonly used in psychological research, such as experimental, correlational, and qualitative approaches.

- 3. Students will gain proficiency in the use of statistical methods and software for data analysis, including descriptive statistics, inferential statistics, and graphical representations of data.
- Students will develop the ability to design and conduct ethical research studies in accordance with the guidelines set forth by relevant professional organizations and ethical committees.
- 5. Students will demonstrate the capacity to critically analyze research literature, identify strengths, weaknesses, and limitations of studies, and synthesize findings from multiple sources.
- 6. Students will be able to interpret and understand various types of data, including quantitative data from experiments and surveys, as well as qualitative data from interviews and observations.
- 7. Students will develop effective communication skills, both written and oral, to convey research findings and methodologies in a clear and coherent manner, suitable for both scientific and lay audiences.
- 8. Students will gain practical experience in conducting research, including data collection, data management, and the use of research tools such as surveys, questionnaires, and laboratory equipment.
- 9. Students will learn to apply critical thinking and problem-solving skills to address challenges and complexities encountered in the research process.
- 10. Students will be able to apply research findings to real-world scenarios and demonstrate an understanding of the importance of evidence-based practices in psychology and related fields.

Required Textbooks and Other Course Materials



1. Morling, B. (2020). Research Methods in Psychology: Evaluating a World of Information (4th ed.). New York, NY: W. W. Norton & Company, Inc. Looseleaf ISBN: 978-0-393-89373-1. Cost: The UTA bookstore sells a digital copy for \$95.00 and a loose-leaf copy for \$118.50 which is comparable to other vendors. You can also rent this textbook for the semester at a considerably lower cost. Additionally, the 3rd edition of the textbook can be used but it is your responsibility to be aware of the changes between editions.

2. Optional text: PSYC 3300 Lecture Notebook for Research Methods in Psychology. ISBN: 978-1-64617-338-9. ONLY AVAILABLE AT UTA. Cost: \$37.00. This manual contains important class information, inclass activities, and homework assignments.

Technology Requirements

- You will need access to Canvas, Lockdown Browser with Monitor, ECHO360, Microsoft Office (e.g., Word, Excel, Teams), which is all available with your UTA account.
- Personal smart device (laptop, smartphone, tablet, etc.) for answering reading quiz questions. If you do not have access to a smart device or laptop, you may check one out at the library.
- Access to a computer with a webcam. Webcams will be used with Respondus Lockdown Browser. Additionally, computers with webcams are available in the OIT Labs, library computers, and on most Departmental desktops (see UTA.edu for hours of operation).

Canvas (https://uta.instructure.com): Assignments, grades, announcements and additional course materials will be posted on Canvas for this class and most of your other courses at UTA.

Grading Information

Course Components Assignment	Point Total
Class Participation (20 $-$ 5 pts)	100 Points
Short Answer (4 — 50 pts)	200 Points
Exams (4 — 100 pts)	400 Points
Total:	700 Points

Class Participation (100 Pts): To enourage active learning, it is expected that students are prepared with knowledge of the topic(s) indicated on the schedule prior to lectures. Class participation will include answering questions via Canvas during lecture. The Lecture Schedule of assigned class topics is provided below.

Short Answer Assignments (200 Pts): For each short answer assignments, students will use the information from the relevant course material to complete an activity and answer a series of short answer and reflection questions independently. These assignments are meant to enrich your understanding of the material and how it pertains to the real world. There will be 4 short answer assignments total, one for each exam unit of material. Each activity is worth 50 points. Electronic copies of the short answer assignments will be provided via Canvas. Short answer assignments are due in Canvas at 11:59PM throughout the semester.

Exams (400 Pts): Four multiple-choice exams will be given throughout the semester as noted on the Course Schedule. The exams are based on the assigned readings, lecture content, and class activities and each exam will be worth 100 points (50 questions worth 2 point apiece). The exams will be given online on Canvas using Respondus Lockdown Browser with webcam. The tests will be available for an allocated time period (see Course

Schedule), and you will have one hour and thirty minutes (1hr, 30 min) to complete each test. Class will not meet on exam days.

Computer/technical difficulties are NOT a valid excuse for missing or not completing an exam! *Note:* Make-up exams will only be given at the discretion of your professor and arrangements must be made before the exam day (see the Make-Up Work and Extension Requests policy for more information). You may take the exam only once. If you do not take the exam during the required period for any reason, it will be considered a "missed" exam and a zero will be entered in as the grade.

Use of textbooks, notes, cell phone, additional computers/laptops, or any other type of technology is not permitted while taking the exam. Students who are caught using additional materials will receive a zero on the exam (see policy on Cheating and Plagiarism and Academic Integrity).

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

Points	Percentage	Letter Grade
630-700	90.0 - 100%	А
560-629	80.0 - 89.9%	В
490-559	70.0– 79.9%	С
420-489	60.0– 69.9%	D
< 419	< 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.

Course Policies and Important Things to Know

Respondus Lockdown Browser and Monitor: Exams will be administered on Canvas with an online proctoring service, Respondus Lockdown Browser, which must be downloaded onto the computer/laptop where all exams will be taken. You will need a webcam and the Lockdown Browser software downloaded on your computer or use of a computer lab on campus that has the Lockdown Browser and a webcam. The Lockdown Browser locks down the testing environment in Canvas and requires use of a webcam for students to record the quizzing/testing session. The webcam can be the type that is built into your computer or one that plugs in with a USB cable. *Note:* not all devices (for example Chromebooks) can access Lockdown Browser with Monitor. Please check that you have access to a device on which you can access all required software. Watch this brief video to get a basic understanding of LockDown Browser and the webcam feature: https://www.respondus.com/products/lockdown-browser/student-movie.shtml

Download and install LockDown Browser from this link:

https://download.respondus.com/lockdown/download.php?id=163943837

Once Installed:

- Start LockDown Browser
- Log into Canvas

Testing Procedure Using LockDown Browser: Before you start your quiz or test, please hold up your student ID for identification purposes. Please stay seated and remain appropriately attired the entire time. Your face (eyes, nose, mouth, etc.) must remain visible in the video recording during the entire quiz. You are prohibited from accessing other resources while taking the quiz/test (such as phone, tablet, notes, books, other people, etc.). You should not discuss the quiz/test questions with other class members or other people (in-person or on social media). If you do not adhere to these requirements for taking a quiz/exam, you will receive a grade of zero (0) on the quiz/exam. If you engage in any activities that violate the UT Arlington Honor Code, you also will receive a referral for scholastic dishonesty and a grade of zero (0). Finally, please remember not to exit the quiz/exam until all questions are completed and submitted for grading. Once you hit submit, your responses are final.

Late Work and Make-Up Work: Lecture attendance is highly encouraged and assignment due dates are set at the beginning of the semester to ensure that you complete assignments in a timely manner and use the assignments to help you better prepare for and study for the exams. Late work is generally not accepted in this course. Assignments that are submitted after the original due date will be considered late. Make-up opportunities for in-class activities, homework, quizzes, and lecture exams will only be given if 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.*

Extra Credit: There is a 10-point extra credit opportunity for this class. 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 10 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. 1 Research Credit = 2 Points of Extra credit. Extra Credit will be applied to your lowest exam grade.

Cheating and Plagiarism Course Policy: Any student who engages in academic misconduct including cheating and plagiarism on any assignment or quiz will receive a ZERO on that assignment 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 <u>Student Conduct</u>. 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 flagged 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.

Institutional Information

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 <u>Institutional Information</u> page (https://resources.uta.edu/provost/course-related-info/institutional-policies.php) which includes the following policies among others:

- Drop Policy
- Disability Accommodations
- Title IX Policy
- Academic Integrity
- Student Feedback Survey
- Final Exam Schedule

Additional Information

Face Covering Policy

Face coverings are not mandatory, all students and instructional staff are welcome to wear face coverings while they are on campus or in the classroom.

Attendance

At The University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator of student success. 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, attendance in 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 verify Federal Student Aid recipients' attendance in courses. UT Arlington instructors should be prepared to report the last date of attendance as part of the final grading process. Specifically, when assigning a student a grade of F, faculty must report the last date a student attended their class based on evidence of academic engagement 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.

Distance education courses require regular and substantive online interaction and participation. Students must participate in online course activities to demonstrate attendance; logging into an online class is not sufficient by itself to demonstrate attendance

Emergency Exit Procedures

Should we experience an emergency event that requires evacuation of the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, do not take an elevator but use the stairwells instead. Faculty members and instructional staff will assist

students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

Academic Success Center

The Academic Success Center (ASC) includes a variety of resources and services to help you maximize your learning and succeed as a student at the University of Texas at Arlington. ASC services include supplemental instruction, peer-led team learning, tutoring, mentoring and TRIO SSS. Academic Success Center services are provided at no additional cost to UTA students. For additional information visit: <u>Academic Success Center</u> (https://www.uta.edu/student-success/course-assistance). To request disability accommodations for tutoring, please complete this <u>form</u> (https://www.uta.edu/student-success/course-assistance/tutoring/request).

▲ The <u>IDEAS Center</u> (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.

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. Non-emergency number 817-272-3381

Course Schedule

As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course.

Please see course updates in Canvas under Announcements—Dr. Dhaliwal

Week	Date	Lecture Topic	Chapter
			Reading
1	Т 8/22	Course Overview and Introduction to Scientific Reasoning	Chapter 1
	Th 8/24	Psychology is a Way of Thinking	
2	Т 8/29	Sources of Information: Research, Experience, Intuition	Chapter 2
	Th 8/31	Finding and Reading Research	
3	Т 9/5	Frequency, Association, and Causal Claims	Chapter 3
	Th 9/7	Construct, Statistical, External, and Internal Validities	
4	Т 9/12	Ethical Guidelines for Psychology Research	Chapter 4
	W /13	Short Answer Assignment #1 Due	
	Th 9/14	Exam 1 – Chapters 1,2,3, & 4 (Available 6:00 AM – 11:59PM)	
5	Т 9/19	Measuring Variables and Reliability	Chapter 5
	Th 9/21	Validity of Measurement	
6	T 9/26	Construct Validity of Surveys and Polls	Chapter 6
	Th 9/28	Construct Validity of Behavioral Observations	
7	T 10/3	Sampling and Generalizability	Chapter 7
	Th 10/5	Sampling and External Validity	
	F 10/6	Short Answer Assignment #2 Due	
8	T 10/10	Exam 2—Chapters 5, 6, & 7 (Available 6:00 AM – 11:59PM)	
	Th 10/12	Bivariate Correlations	Chapter 8
9	T 10/17	Interrogating Association Claims	
	Th 10/19	Multivariate Correlational Research	Chapter 9
10	T 10/24	Multivariate Correlational Research	
	Th 10/26	Introduction to Simple Experiments	Chapter 10
11	T 10/31	Independent- and Within- Groups Designs	
	Th 11/2	Confounding and Obscuring Variables	Chapter 11
	F 11/3	Short Answer Assignment #3 Due	•
12	T 11/7	Exam 3—Chapters 8, 9, 10, & 11 (Available 6:00 AM – 11:59PM)	
	Th 11/9	Experiments with More than One IV	Chapter 12
13	T 11/14	Factorial Designs	
	, Th 11/16	Quasi-Experiments	Chapter 13
14	T 11/21	Small-N Designs	
	Th 11/23	Thanksgiving Break	
15	T 11/28	Replication, Transparency, and Real-World Importance	Chapter 14
	Th 11/30	Short Answer Assignment #4 Due	
16	T 12/5	Review	
	T 12/12	Exam 4—Chapters 12, 13, & 14 [Available 6:00AM – 11:59PM]	