

JTC 664

Quantitative Methods in Communication

Spring 2023 | Mondays 3 to 5:50pm

ABOUT

Research is a powerful tool for understanding and addressing important issues in which communication plays a role. Findings from quantitative methods are often a necessary decision-making tool for policymaking, problem-solving, and designing best practices. This course builds from what you learned about quantitative methods in JTC 500 to solidify those concepts and dive into more particulars of and practice with surveys, experiments, content analysis, observation, and statistical analyses. We will learn how to conduct quantitative research from a social justice perspective with “care and concern for issues of access, diversity, equity, and inclusion” (Scharrer & Ramasubramanian, 2021, p. xvii). In addition, we will discover the importance of quantitative research and the significance of putting research in the hands of individuals and changemakers.

Learning Objectives

1. Describe quantitative research methods used by communication scientists
2. Propose and evaluate quantitative research designs with a social justice lens
3. Identify appropriate statistical procedures for different research scenarios
4. Analyze and interpret quantitative research data using SPSS
5. Create and administer simple online surveys/experiments using Qualtrics.
6. Design an original communication research project, including the formulation of research questions, explication of key variables, and the development of appropriate methods for generating the data.
7. Collaborate and provide/receive constructive peer feedback through class discussions, assignments, and projects.



ASSESSMENT

- 12% Participation
- 13% Discussion Lead
- 20% Quizzes (4x5%)
- 20% Data Practices (4x5%)
- 35% Research Paper (3 parts)

INSTRUCTOR

Dr. Abrams | Clark C221
Schedule meeting or drop in during office hours. [See Calendly.](#)

Please email me with “664” in the subject line or use Canvas Inbox.



2 Required Resources

[Quantitative Research Methods in Communication: The Power of Numbers for Social Justice](#)

Starting Feb. 13: 3-month subscription to [Laerd Statistics](#)

2 Recommended: (1) *Discovering the Scientist Within: Research Methods in Psychology* (2nd or 3rd edition); (2) SPSS 28/29 license ([Premium](#) or [GradPack Standard](#))

HOW WE'LL LEARN

Arrive Prepared

Complete all assigned readings, bring notes you took while reading, and ask questions. [Watch “Reading strategies for distracted and slow readers in grad school.”](#) Also [see this handy note-taking strategy](#).

Participate in Class

Here are the behaviors that count: 1) asking questions, 2) answering questions, and 3) making comments (particularly those that relate to material in the text and for sharing relevant experiences). Value-added behaviors—these put your contributions at the “A” grade level: 1) responding to something another student says (including answering a question asked by a student), and 2) constructively disagreeing with something in the readings or said in class by me or another student. Behaviors to avoid: 1) not listening, 2) pretending to be listening while partaking in a distracting behavior (e.g., browsing on mobile device or laptop, reading something unrelated to class, doodling, nodding off to sleep, etc.), 3) speaking without being recognized, or 4) making fun or otherwise berating something said by another person.

May I call on you? Let me know. My preference is to go with volunteers. Grading participation is necessarily subjective, but I will incorporate others’ input as well.

Generally, letter grades in this category of assessment are earned as follows: A - participates regularly in a value-added manner without being called upon, integrates contributions from peers, professor, and/or speaker; B - participates regularly without being called upon but not often in a value-added manner; C - rarely participates, or regularly makes unhelpful contributions; D - Absent 4 times; F - Absent 5 or more times. Your participation is worth 12% of your course grade.

Complete Other Assessments*

Discussion Lead: You will sign up to be discussion leaders once during the semester. You’ll be given readings to prepare that your peers will also read. Your role is to teach from the readings, inspire discussion, give students feedback, and if desired, embed an activity.

Quizzes: A multiple-choice question quiz will be administered for every method we cover. Expect to see concepts from assigned readings and lecture. These will take place in class on Canvas. Grades will not be curved. (4 quizzes each worth 5%)

Data Practices: You will work with datasets to practice the most common statistical analyses used for methods we cover. (4 practices each worth 5%)

Research Prospectus: You’ll craft a 650-word research prospectus outlining a study you would like to design using a single quantitative method. PhD students may request approval to design with more than one quantitative method. (5%)

Research Mini-Proposal: You’ll turn in what essentially amounts to a draft of your final research proposal to get early feedback in advance of running your pilot study. (10%)

Research Proposal and Pilot Study Results: Your quantitative methods knowledge and skills will culminate in research proposal that is lighter on the literature review and heavier on the methods. As a part of this assignment, you will collect and analyze data from a small convenience sample of students using SONA or about 30% of your proposed sample for a content analysis. Using these data, you will practice your statistical analyses that test your hypotheses or answer your research questions. (20%)

*Collaboration: Students are **not** allowed to collaborate on quizzes or data practices. On the research project, master’s students are **required** to work with a partner. PhD students may elect to work alone or with a partner. A partnership may dissolve at the discretion of either party with notice emailed to Dr. Abrams. Prior to notifying Dr. Abrams, the partner must be notified in advance and decisions made about how to part ways given the work each person did. Consider using [CSU’s free conflict coaching](#) for grad students. A self- and peer-assessment form will be used to assign differential grades, if warranted, at the end of the semester.

COURSE POLICIES & CSU RESOURCES

Flexibility

Attendance: You may miss class twice without penalty. Missing class a 3rd time drops your participation score by one letter grade. This is an in-person class. As such, I will not accommodate students to join via Zoom more than twice without an SDC accommodations memo or medical documentation with dates required not to attend class in person. I may elect to run class on Zoom in the event of my own illness or poor weather that borderlines university closure without causing closure.

Late Work: Except for discussion lead, assignments are accepted late for any reason whether that reason is in or out of your control with a 6% penalty within 12.5 hours of the deadline and 11% penalty within 12.6-24 hours. Extensions without penalty or beyond 24 hours are only provided with a [CSU Case Management Office](#) memo. **What about technology problems though?** Due to the challenge of verifying tech-related issues, technology-related excuses are still penalized with the late deduction. Please work in advance of the final hours of the deadline to be able to troubleshoot or work around the most common technology issues. This is simply a pre-requisite of working professionals in 2023. You should be saving your work simultaneously to the cloud and your local computer. CSU provides graduate students 1 TB (1,000GB) of cloud storage space on [Microsoft OneDrive with your CSU/Office 365 login](#). If you need help setting up your computer to work with OneDrive, please contact [CSU IT](#). Should you encounter Internet connectivity issues or problems using or accessing required software/services to do an assignment (SPSS, Laerd) in the final hours of its deadline, you will still be assessed the late penalty. You may tether to your cell phone data connection, go to a local library or business with public wifi, or head to campus to use campus wifi at any hour, any day. Outages of CSU services (wifi, Canvas) or severe weather that takes out utilities is the only exception, but I will need some form of documentation. (CSU notifies faculty of wifi and Canvas outages.)

Fostering a Successful Learning Environment

The classroom environment is affected equally by student and professor. I ask for your participation in creating a comfortable and engaging environment for learning through encouraging each other's participation, taking all questions seriously, and treating everyone with respect. I approach my role as a knowledgeable facilitator, not the ultimate authority or arbiter of the literature. Any student who does not appear to be actively contributing to a supportive environment will be asked to leave the classroom and/or meet with the professor to discuss how they may both improve one another's experience in the classroom.

Digital Devices: I strongly encourage students to take written notes and not rely on a tablet or laptop. If you are accustomed to taking notes on a digital device, please ensure it is a "do not disturb" mode so you are not receiving notifications from emails, text messages, social media, or other apps. I also expect you to use the device for taking notes and referring to notes or readings. There will be sufficient opportunity for you to "scratch the Internet and text messaging itch" during breaks or periods of time in which you are waiting for discussion to resume. If I notice it is a problem for you to remain focused, I will ask you to switch to paper or move to a digital device zone should I notice you repeatedly distracted. If you decide a digital device zone is best for you, for in-class activities, you may have to work alone rather than with a peer to ensure you're not riding someone else's coattails.

CSU Principles of Community

Inclusion: We create and nurture inclusive environments and welcome, value and affirm all members of our community, including their various identities, skills, ideas, talents and contributions.

Integrity: We are accountable for our actions and will act ethically and honestly in all our interactions.

Respect: We honor the inherent dignity of all people within an environment where we are committed to freedom of expression, critical discourse, and the advancement of knowledge.

Service: We are responsible, individually and collectively, to give of our time, talents, and resources to promote the well-being of each other and the development of our local, regional, and global communities.

Social Justice: We have the right to be treated and the responsibility to treat others with fairness and equity, the duty to challenge prejudice, and to uphold the laws, policies and procedures that promote justice in all respects.

Diversity and Inclusion

“In our structured and unstructured discussions and dialogues, we also will have many opportunities to explore some challenging issues and increase our understandings of different perspectives. Our conversations may not always be easy; we sometimes will make mistakes in our speaking and our listening; sometimes we will need patience or courage or imagination or any number of qualities in combination to engage our texts, our classmates, and our own ideas and experiences. Always we will need respect for others. Thus, an additional aim of our course necessarily will be for us to increase our facility with the sometimes difficult conversations that arise as we deepen our understandings of multiple perspectives – whatever our backgrounds, experiences, or positions.” ([Portnoy, 2014](#)) Also see [bias reporting website](#).

Academic Integrity

I will not tolerate academic dishonesty: any act of deception, plagiarism, making up or falsifying information, buying content and representing it as your work, or cheating. Violations of academic integrity also include using content generated by artificial intelligence (e.g., ChatGPT or others), buying/finding content for an assignment, or having someone else whether paid or not do the work for you and representing it as your own. Plagiarism is the unauthorized or unacknowledged use of another person's words. This includes using someone else's words verbatim (e.g., copy/paste) without quotation marks and accurate citation. It also includes writing in your own words about someone else's idea (paraphrasing) without citation or misrepresenting directly quoted content as paraphrased. Done on purpose, it is cheating. Done accidentally, it is no less serious. Regardless of how it occurs, plagiarism is a theft of intellectual property and a violation of an ironclad rule demanding "credit be given where credit is due." You will earn an automatic 0 on the assignment and it will be followed up with notifying your department and the university. Plagiarism could result in expulsion from the university. Further information about Academic Integrity is available at CSU's [Academic Integrity – Student Resources](#).

Regarding Artificial Intelligence or AI (e.g., Chat GPT): Academic Integrity involves more than trying to steer clear of academic offences. But AI tools require your special attention to two aspects: attribution and facticity. As with your own work, you must take responsibility for both. This section defines the standards you must apply.

Attribution. All ideas that are not originally one's own have a source and that source must be referenced. This applies to your work, but it also applies to the AI itself: since the AI does not have ideas of its own, you need to find and reference the original source that supports its assertions. An appropriate reference must have the required format, state the exact location of the referenced fact in the source, and include a working link to the source. If you quote the AI itself, label it as “synthesized communication” and reference it like the conventions for a “personal communication”. Note that this “synthesized communication” is not a valid source for facts, only for the conversation itself.

Facticity. Sometimes the AI makes mistakes. It happens that statements are eloquent and confident – but entirely false. In addition, the AI's statements may reflect biases in its training data. You need to check the facts, the references, the quotes, the logic – and document in an appendix what you did to validate the AI's assertions. Submitting factually wrong material is an academic offence, and whether the source of the error is you or the AI makes no difference.” ([The Sentient Syllabus Project](#), 2023)

Canvas Information and Technical Support

Canvas is where course content, grades, and communication will reside for this course. That includes updates to class policies, schedule, deadlines, and assigned work. Login: canvas.colostate.edu, Support: canvas.colostate.edu/support. For passwords or any other computer-related technical support, contact the [Central IT Technical Support Help Desk](#). Voice: (970) 491-7276, Email: help@colostate.edu

Universal Design for Learning/Accommodation of Needs

CSU is committed to the principle of universal learning. This means that our classroom, our virtual spaces, our practices, and our interactions should be as inclusive as possible. Mutual respect, civility, and the ability to listen and observe others carefully are crucial to universal learning.

If you are a student who will need accommodations in this class, please contact your instructor to discuss your individual needs. Any accommodation must be discussed in a timely manner. A verifying memo from the [Student Disability Center](#) (SDC) may be required before any accommodation is provided. **I require the verifying memo be provided no later than February 3 if you have an existing need for accommodations.**

[The Student Disability Center \(SDC\)](#) has the authority to verify and confirm the eligibility of students with disabilities for the majority of accommodations. While some accommodations may be provided by other departments, a student is not automatically eligible for those accommodations unless their disability can be verified and the need for the accommodation confirmed, either through SDC or through acceptable means defined by the particular department. Faculty and staff may consult with the SDC staff whenever there is doubt as to the appropriateness of an accommodative request by a student with a disability.

The goal of SDC is to normalize disability as part of the culture of diversity at Colorado State University. The characteristic of having a disability simply provides the basis of the support that is available to students. The goal is to ensure students with disabilities have the opportunity to be as successful as they have the capability to be.

Support and services are offered to student with functional limitations due to visual, hearing, learning, or mobility disabilities as well as to students who have specific physical or mental health conditions due to epilepsy, diabetes, asthma, AIDS, psychiatric diagnoses, recurrent migraines, etc. Students who are temporarily disabled are also eligible for support and assistance.

Any student who is enrolled at CSU, and who self-identifies with SDC as having a disability, is eligible for support from SDC. Specific accommodations are determined individually for each student and must be supported by appropriate documentation and/or evaluation of needs consistent with a particular type of disability. SDC reserves the right to ask for any appropriate documentation of disability in order to determine a student's eligibility for accommodations as well as in support for specific accommodative requests. The accommodative process begins once a student meets with an accommodation's specialist in the SDC.

Student Case Management

[Student case management](#) is available to help students with extenuating life circumstances and connect them with resources. In some cases, after you and your instructor discuss your situation, your instructor may request [verifiable documentation for class absences](#) from the SCM office if you request considerations for absences or missed coursework.

Mental Health and Wellness

CSU is a community that cares. You are not alone. CSU Health Network Counseling Services has trained professionals who can help. Your student fees provide access to a wide range of support services.

Call Counseling Services at (970) 491-6053, and they will work with you to find out which services are right for you.

[CSU counseling services](#)

[Student mental health and well-being resources](#)

If you are concerned about a friend or peer, use **Tell Someone** by calling (970) 491-1350 or visiting <https://supportandsafety.colostate.edu/tell-someone/> to share your concerns with a professional who can discreetly connect the distressed individual with the proper resources. Rams Take Care of Rams. Reach out and ask for help if you or someone you know is having a difficult time.

Undocumented Student Support

Any CSU student who faces challenges or hardships due to their legal status in the United States and believes that it may impact their academic performance in this course is encouraged to visit [Student Support Services for Undocumented, DACA & ASSET](#) for resources and support. Additionally, only if you feel comfortable, please notify your professor so they may pass along any additional resources they may possess.

Food Insecurity

Any CSU student (along with faculty and staff) who is experiencing food insecurity can receive support from the [Rams Against Hunger](#) program. Services include a food pantry, a meal-swipe program, pocket pantries, and in-person assistance with navigating federal aid eligibility. The RAH page includes numerous resources as well as county, state and federal programs which are described and linked.

Title IX/Interpersonal Violence

For the full statement regarding role and responsibilities about reporting harassment, sexual harassment, sexual misconduct, domestic violence, dating violence, stalking, and the retaliation policy please go to: [Title IX – Sexual Assault, Sexual Violence, Sexual Harassment](#).

If you feel that your rights have been compromised at CSU, several resources are available to assist: [Student Resolution Center](#), [Office of Equal Opportunity](#),

A note about interpersonal violence: If you or someone you know has experienced sexual assault, relationship violence and/or stalking, know that you are not alone. As instructors, we are required by law to notify university officials about disclosures related to interpersonal violence. Confidential victim advocates are available 24 hours a day, 365 days a year to provide support related to the emotional, physical, physiological and legal aftermath of interpersonal violence. Contact the Victim Assistance Team at: 970-492-4242.

Adult and Veteran Learner Support at CSU

CSU provides services and resources for students that self-identify as adult learners or military veterans. They provide free drop-in childcare and other resources for parents in graduate school. They also provide career services such as resume reviews, advice for seeking jobs, and more by acting as a liaison with university services. Go to <https://alvs.colostate.edu/> for more information.

Student Parents/Guardians/Caregivers

CSU recognizes that student parents/guardians and caregivers face distinctive challenges in succeeding academically, and we are committed to supporting those of you who are parents to achieve course learning outcomes. If you encounter challenges in meeting course expectations – for example, fulfilling attendance and participation requirements or submitting assignments due to a child or person in your care's illness, essential appointment, school closure, etc. – please contact your instructor as soon as possible (beforehand if feasible or as soon afterward you reasonably can if not). Work with your instructor to develop a plan for you to make up missed work. Also, please see the course syllabus for related course policies. If you need to bring your child or person you care for to class, for example because you're nursing or planned alternative care became unavailable, check with your instructor about whether you may do so if you believe it's feasible for you to participate in class and support your child or person in your care.

Group work assignments should be designed to provide flexible approaches to participating, and all groups should develop plans that enable all members to contribute equitably. If your group encounters challenges in doing so, please reach out to your instructor to devise a solution. Finally, know that [pregnant and parenting students are guaranteed equal educational opportunities by Title IX](#); know your rights, the protections provided, and how to advocate for yourself.

Please understand I am a parent to a young child and as such maintain boundaries on my time in the evenings and weekends/holidays. I also may have to adjust how and when I teach or conduct course communication based on having to care for my child unexpectedly.

Religious Observances

CSU does not discriminate on the basis of religion. Reasonable accommodation should be made to allow individuals to observe their established religious holidays. Please see [CSU's Religious Observances Calendar](#). Students seeking an exemption from attending class or completing assigned course work for a religious holiday will need to fill out the [Religious Accommodation Request Form](#) and turn it in to the Division of Student Affairs, located on the second level of the Administration building. Once turned in, the Division of Student Affairs will review the request and contact the student accordingly. If approved, the student will receive a memo from the Dean of Students to give to their professor or course instructor. Students are asked to turn in the request forms as soon as the conflict is noticed. Similarly, unanticipated conflicts requiring a religious observance, such as a death in the family, can also be reviewed.

Conflict

If you have a conflict with another student in the course, I encourage you to use [CSU's free conflict coaching](#) for students. Please schedule a meeting with me for additional assistance on accommodating the parties in keeping peace or comfort. When [interpersonal violence](#) (assault, harassment, stalking, etc.) or [bias](#) is involved, please also pursue university reporting. You may wish to also report to the graduate program and/or department chair. If you have conflict with me over how I communicate any course changes or how I am conducting the course, please schedule a meeting to discuss. As a next step, the department chair or graduate program chair may serve as a mediator.

Grade Disputes: Calculation errors do not require a detailed, written response. Simply send me an email identifying my error. At some point in this course, you may disagree with a grade on an assignment. There are rare cases in which I am inaccurate or did not explain fully my judgment and would be happy to hear your rationale. Failure to understand the assignment and/or read instructions or rubrics are not legitimate reasons to file a dispute. It is YOUR responsibility to clarify your understanding of assignments with me beforehand.

You must take a *minimum of 24 hours* to think about your grade, review your assignment, review the rubric and instructions, and then file your dispute to me in writing. I will only review your grade if you provide me with a written response explaining your perspective and rationale concerning your grade. You may send this response via email. Your argument should be well-reasoned and based on evidence. It does not have to be long, but there should be a good rationale for why the grade should be changed along the lines of course concepts and the rubric/instructions. An argument that my expectations are too high is an insufficient reason. Your written argument must be submitted within 5 days of the time the work was returned to you or the grade was posted. After 5 days, no assignment grades will be considered for change. Schedule a meeting with me to further discuss your grade. I will need 2-3 days to consider your assignment and rationale before this meeting and may need another 48 hours after the meeting to deliberate further. I will not discuss disputes over email.

Tentative Course Schedule

Date	Topic, Baseline Preparation*	Assignments Due This Week
1/16	University Holiday	Review Canvas site, syllabus
1/23	Chapter 1 Foundations and Definitions	
1/30	Chapter 2 Ethical Considerations	
2/6	Chapter 3 Operationalization and Otherness	
2/13	Chapter 4 Sampling and Representation	Research Prospectus
2/20	Lewandowski et al. Ch. 6 Observational Research	Practice Quiz: Sampling
2/27	Chapter 5 Soliciting Opinions Through Survey Research	Quiz 1: Observational Methods
3/6	Lewandowski et al. Ch. 7 Correlational Research, Survey Design	Data Practice 1: Correlations
3/13	SPRING BREAK	
3/20	Chapter 7 Examining Communication Content in Content Analysis Research; Guest lesson: Dr. McGregor , University of North Carolina	Quiz 2: Surveys
3/27	Chapters 8-9 Calculations, Complexity, Statistical Analysis	Quiz 3: Content Analysis Data Practice 2: Data clean-up and prep
4/3	Chapter 6 Studying Responses Through Experimental Methods Lewandowski et al. Ch. 8 Two-Group Design	Data Practice 3: Comparing 2 groups
4/10	Lewandowski Ch. 9 Multi-Group Design Lewandowski Ch. 10 Within Subjects Design	Quiz 4: Experiments Research Mini Proposal
4/17	Statistics continued, if needed OR Final Paper Workday	Data Practice 4: Multivariate statistics
4/24	Chapter 11 Community Partnerships Chapter 12 Communicating Research	
5/1	Hold for pushing back schedule due to weather or unforeseen class cancelations OR Final Paper Workday	
5/8	Finals week – no class meeting	Final Research Proposal and Pilot Study Results
NOTE	<i>Additional <u>required</u> readings will be posted to Canvas each week</i>	<i>See Canvas for times/dates of deadlines; Light homework may be posted to Canvas as needed at least 5 days before due.</i>

Syllabus Subject to Change: Topics, assignments, and deadlines are subject to change with sufficient notice relative to the scope of the assignment or required preparation. It is your responsibility to monitor Canvas announcements for changes required. I may need to alter assigned readings or add preparation homework, but I will usually provide at least 5 days' notice for smaller changes such as this. Policies are subject to change with notice posted to Canvas as well.