

**Comm 3750-001: Quantitative Research Methods  
Fall 2019**

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**Course Description:** Along with effective communication skills and a good working knowledge of business principles, understanding research methods is one of the most important skills for communication majors in today's marketplace. The goal of this course is to help you understand how communication is studied using quantitative (numerical) principles and techniques. Such understanding will enable you to be a more knowledgeable and critical consumer, and a limited producer, of quantitative research findings.

**Textbooks and Required Materials:**

Frey, L. R., Botan, C. H., & Kreps, G. L. (1999). *Investigating communication: An introduction to research methods* (2nd ed.). Boston, MA: Allyn & Bacon. (TB in schedule)

Frey, L. R., Botan, C. H., Friedman, P. G., & Kreps, G. L. (1992). *Interpreting communication research: A case study approach*. Englewood Cliffs, NJ: Prentice Hall. (CB in schedule)

**Strongly Recommended Style Manual:**

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

**National Communication Association Learning Outcomes in Communication (LOCs):**

Distinguish the Communication discipline from related areas of study  
Interpret Communication scholarship  
Evaluate Communication scholarship  
Formulate questions appropriate for Communication scholarship  
Engage in Communication scholarship using the research traditions of the discipline  
Differentiate between various approaches to the study of Communication  
Contribute to scholarly conversations appropriate to the purposes of the inquiry

**Course Objectives:** By the end of the semester, you should have a better understanding of:

- A. Assumptions, languages, rules, and social customs that characterize the quantitative communication research methods culture
- B. How to conceptualize communication research from a quantitative perspective, including identifying appropriate communication topic worth studying, finding and reviewing research literature, and phrasing topics as formal research questions and/or hypotheses
- C. How to move in a planned, systemic process from the conceptual to the operational level in the quantitative study of communication
- D. Basic principles of three quantitative methodologies used to investigate communicative behavior: experimental, survey, and (quantitative) textual analysis (e.g., content and interaction analysis)
- E. How to analyze quantitative data to describe communication and to make inferences about

- differences between groups/conditions and relationships between variables
- F. How to discuss and apply findings obtained from quantitative communication research
- G. How to conduct and report a quantitative communication research study

### Major Assignments

- A. *Examinations* (3 examinations: 45% total; 15% each): The first two examinations currently are scheduled for October 1 and October 29; the third examination is Tuesday, December 17, 7:30–10:00pm. Examinations are based on identifications/definitions and short explanations. There are no early or makeup examinations given, except for university-excused circumstances (e.g., medical emergency), so please do not make travel plans before the third examination.
- B. *Research Project* (45%; 30% for final paper; 15% for first paper; see handout for additional information about these papers): Students will be assigned randomly to a group that conducts a quantitative communication research project. The first paper for this research project (the first three parts of the final paper: introduction, review of the literature, and research question or hypothesis) is due on October 8. Two copies of the final paper are due December 10. A short oral summary of the paper (with the presentation factored into the participation grade, explained below) will be given on December 10.

Any communication concept, theory, variable, or context can be studied for the research project. The purpose may be to describe communicative behavior, but most projects go beyond that purpose to examine how groups/conditions differ with regard to communicative behavior or how communicative behavior is related to other variables. The following list might give you some ideas for this project (also see the list of high-quality projects completed for this course):

1. Examine the nature and effects of nonverbal behaviors (e.g., facial expressions, eye contact, gestures, or use of space or time)
2. Study effects of psychological/personality traits (e.g., self-esteem) on communicative behavior
3. Assess persuasive effects of various sources, messages, channels, contexts, and receivers
4. Categorize/code and/or examine effects of communicative behavior (e.g., self-disclosure or compliance-gaining strategies) in/on interpersonal relationships (e.g., friendships)
5. Examine relationships between communicative behavior and group or organizational outcomes (e.g., satisfaction or productivity)
6. Study communication differences between populations (e.g., males and females, African Americans and Caucasians, U.S. Americans and members of other cultures)
7. Document changes in newspaper coverage of important topics or television shows content during the past 10–20 years
8. Conduct a media gratifications study examining reasons why people use media (e.g., text messaging)
9. Examine effects of media (e.g., television portrayals of violence) on people's beliefs, attitudes, values, and/or behavior (e.g., aggressive behavior)

C. *Participation* (10%): This grade is based on (a) verbal contributions to class discussions (e.g., sharing your viewpoints about the material we discuss, which helps to make class discussions more meaningful, and asking questions about the material, which helps class members to understand it more effectively); (b) participation in the almost daily in-class exercises and activities; and (c) the quality of any additional assignments (e.g., reports of additional readings). Everyone is entitled to one absence during the semester; a second absence will result in a grade of “F” for participation and in the lowering of the final course grade by a whole grade (e.g., if you would have received a course grade of B, you will receive a course grade of C), with each additional absence resulting in the lowering of the final course grade by another whole grade (e.g., from a course grade of B to a D for the third absence). If all class sessions are attended, the final course grade will be raised one grade step (e.g., if you would have received a course grade of C+, you will receive a course grade of B-).

### Course Schedule

August 27	Introduction to the Course  Chapter 1 (TB): Introduction to the Research Culture Chapter 1 (CB): Interpreting Communication Research
Sept. 3–10	Part I: The Quantitative Communication Research Methods Culture  Chapter 2 (TB): Asking Questions about Communication (9/3) Chapter 3 (TB): Finding, Reading, and Using Research (9/10)
Sept. 17– Oct. 1	Part II: Planning and Designing Quantitative Communication Research  Chapter 4 (TB): Observing and Measuring Communication Concepts (9/17) Chapter 5 (TB): Designing Valid Communication Research (9/24) Chapter 6 (TB): Research Ethics and Politics (10/1)
Oct. 8–29	Part III: Methodologies for Conducting Communication Research  Chapter 7 (TB) & Section I (CB): Experimental Research (10/8) Chapter 8 (TB) & Section II (CB): Survey Research (10/15) Chapter 9 (TB) & Section III (CB): Textual Analysis (10/22) Chapter 10 (TB) & Section IV (CB): Naturalistic Inquiry (10/29)
Nov. 5– Nov. 19	Part IV: Analyzing and Interpreting Quantitative Data  Chapter 11 (TB): Describing Quantitative Data (11/5) Chapter 12 (TB): Inferring from Data: Estimation and Significance Testing (11/5) Chapter 13 (TB): Analyzing Differences between Groups (11/12) Chapter 14 (TB): Analyzing Relationships between Variables (11/12)

Dec. 3 Writing Up Quantitative Communication Research

Chapter 15 (TB): Epilogue: Concluding Research

Dec. 10 Research Project Presentations

Final Class Session