

COM 300 Final Exam Study Guide

The final exam **is cumulative**, meaning all course material could be on the exam. Not everything on this list will be on the exam; however, everything on here is important to know to pass the class and be a competent communication researcher. I will say, however, that an emphasis is put on content since the midterm. **This is a list based on a combination of lectures and readings.**

From Lectures & Readings

Getting Started

- Research Paradigms
- Types of research (qualitative/quantitative/mixed)
- Empiricism
- Ontology, Epistemology, Methodology, Axiology
- Triangulation
- Action Research
- APA Style (what it is & how to cite an article)
- Inductive Reasoning
- Deductive Reasoning
- Parts of an academic journal

Variables & Operationalizing

- Concept/conceptualization
- Operation/operationalizing
- Independent Variables
- Dependent Variables
- Levels of Data Measurement (interval, ordinal, etc.)

Literature reviews

Research Process (Steps 1-4)

- Hypotheses
- Research Questions
- One- vs. Two-tailed test

Reliability, Validity & Errors

- Reliability (+ assessments)
- Validity (+ assessments)
- Composite measures
- Multidimensional
- Unidimensional
- Measurement Error
- Cronbach's alpha
- Scales (Likert, semantic differential)
- Continuous & Discrete variables
- Point vs. Item
- Refereeing
- Peer-review
- Impact Factor
- Primary vs. Secondary Source
- Boolean operators
- DOI

Sampling

- Population
- Random Sample (+ 4 types)
- Non-random Sample (+ 4 types)

- Sampling Error
- Confidence Interval & Confidence Level

Ethics

- Milgram Experiment
- Tuskegee Experiment
- Stanford Prison Experiment
- Belmont Report
- Three Ethical Principles
- IRB
- Informed Consent
- Deception
- Privacy

Survey Research

- Surveys
- Questionnaires
- Cross-Sectional vs. Longitudinal
- Leading/biased questions
- Double-barreled questions
- Model of Cognitive Processing
- Manipulation checks
- Open- vs. Closed-ended questions

Experimental Research

- Correlation
- Causation
- Field vs. Lab Experiments
- Internal vs. External Validity
- Random Assignment
- Posttest only design
- Pre-Post design
- Solomon's Four Group design
- Repeated Measure design
- Factorial design

Qualitative Research

- Case Studies
- Content Analysis
- Discourse Analysis
- Ethnographies
- Phenomenology
- Analysis-based research
- Interviews (Ustructured, Semistructured, Structured)
- Focus Groups
- Validity & Reliability (in Qualitative Research)
- Grounded Theory
- Coding (Fixed vs. Flexible)

- Analytic Memos

Analysis

- Descriptive Statistics
 - Number of cases
 - Measures of Central Tendency
 - Measures of Dispersion
 - Frequencies
- Normal Distribution
- Inferential Statistics

- Type I vs. Type II Errors
- Probability
- Significance Level
- Test basics (e.g., *when* would you do it, not *how* you would do it)
 - Correlation
 - t-Test
 - Chi-Square
 - ANOVA
 - Regression

As you think about what might be short and/or long answers on the exam, I would encourage you to look at the SLO's, which often influence the content on the short/long answers on the exams.

Student Learning Outcomes (SLOs). As a result of full participation in this course, you will be able to:

1. Understand and carefully analyze communication research published in peer-reviewed, scholarly journals (PLOs 1, 2); **[you did this on the midterm in the long answer]**
2. Identify the major research methodologies and distinctions within the communication discipline, and explain the types of projects for which each method is best suited (PLO 2); **[you did some of this on the midterm in the short answers]**
3. Design critical portions of a research project that identifies and establishes the relevance of research questions and/or hypotheses, reviews relevant scholarly literature, presents a methodology for gathering and analyzing data to address the research questions and/or test the hypotheses (PLOs 2, 3);
4. Explain how communication research methods are relevant to practical problems in mediated communication (PLOs 1, 2);
5. Ultimately, think creatively, independently, analytically, and systematically about how researchers and media practitioners in industry rely on rigorous research methods to understand human behavior (PLOs 1, 2).