

COMM 600: Empirical Research in Communication
Spring 2008
University of Maryland, College Park
Department of Communication

Professor:	Dr. Torsten Reimer
Office Location:	2114 Skinner Building
Office Phone:	(301) 405-0873
Email:	treimer@umd.edu
Office Hours:	Thursday 3:00-5:00 p.m., and by appt.
Class meets ...	
When?	Thursday 6:30-9:30 p.m.
Where?	SKN 2127

1) Course Description

This course is designed to introduce graduate students with diverse backgrounds in communication to the basics of quantitative communication research. It covers the same topics as COMM400. In COMM600, we will discuss the concepts in more detail, and this course also leaves more room for methodological questions that are specific to the graduate students' own research.

Social scientists have developed a large set of scientific tools including a variety of research methods. These tools have been tailored to address specific classes of research questions. As a hammer is ideal for hammering in nails, but useless for sawing a board, it is central to choose appropriate research tools when conducting a communication study. We will show how these tools can help us better understand communication phenomena when used appropriately and how they can deceive us when used inappropriately. The methods we discuss include methodological concepts (e.g., the concept of a theory, a hypothesis, and a variable), research strategies (e.g., descriptive, correlational, and experimental strategies), and statistical tools (e.g. the concept of a mean, a correlation, and a t-test). At the end of the semester, you should be able to: (1) describe each of the tools we will have discussed and understand how they function; (2) to critically evaluate quantitative communication research that incorporates these tools; (3) and to appropriately select and apply tools from your toolbox to answer new research questions. In addition, students are required to introduce a methodological problem they have been facing in their research (e.g., a measurement issue, or a question regarding a specific design) and to do a presentation on a research tool that is not covered in our syllabus (e.g., meta-analysis, modeling, simulations, log-linear models, cluster analysis, focus groups, or a qualitative research method).

Perhaps most important, we will conduct two research projects, putting into practice the design, instrumentation, and analysis skills acquired throughout the class. The written report will be prepared in accordance with the professional criteria specified in the Publication Manual of the American Psychological Association (5th ed.). Thus, this course is designed to provide both an overview of the research process and practical experience in conducting research.

2) Textbook

Gravetter, F. J., & Forzano, L.-A. B. (2006). *Research methods for the behavioral sciences*. Belmont, CS: Thomson Wadsworth.

A few additional readings referring to our empirical projects will be assigned during the semester. These readings will be available on our class Blackboard at <https://elms.umd.edu>. Instructions on how to access our Blackboard will be distributed in class.

3) Course Requirements and Grading

The requirements of this course will involve the following:

- 1) Read all assigned readings.
- 2) Attend classes and participate actively in class discussions, answering questions, and making comments frequently.
- 3) Take all three exams (you can drop your lowest score).
- 4) Take the 3 Quizzes.
- 5) Present a methodological problem (presentation I) and a research method (presentation II) in class (you can do that in groups of two or three students).
- 6) Do the homework that is related to your group project.
- 7) Write a stimulating and accurate research report.

a) Marking System

The following symbols are used on the student's permanent record for all courses in which he or she is enrolled after the initial registration and schedule adjustment period: A+ (100%); A (93-99%); A- (90-92%); B+ (89%); B (83-88%); B- (80-82%); C+ (79%); C (73-78%); C- (70-72%); D+ (69%); D (63-68%); D- (60-62%); F (below 60%); XF; I; P; S; and W. These marks remain part of the student's permanent record and may be changed only by the instructor upon certification, approved by the department chair and the dean that an actual mistake was made in determining or recording the grade.

b) Assignment of Grades

Assignment	Maximum Points
Your best exam	100
Your second best exam	100
Research paper (group project)	100
Homework (group project)	50
Quizzes	30
Presentations	20
OVERALL	400

Total possible points for the semester = 400 points.

The student's final course grade will be computed by dividing the total number of points earned by the total number of possible points and multiplying by 100 to obtain a percentage of points earned. The final course grade will then be assigned according to the grading scale above (see *Marking System*). Policy on grade appeals: Any appeals must be submitted in writing, within 7 days after the assignment/exam has been returned.

c) Tests (200 points)

There will be two tests during the semester and one final exam. Exams will cover the reading assignments, handouts, lectures, class discussions, demonstrations, and audio-visual materials used in class. Generally, exams will include multiple choice questions. Although there will be *three* exams, only your *best two exams* will count toward your final grade. *Do not intentionally miss one of the first two exams!* You may end up with an exam score that is unsatisfactory and cannot be dropped. However, if you are pleased with your performance on the first two exams, you may opt not to take the final exam. *No additional make-up exams will be given prior to or after a missed exam, regardless of the reason why the exam was missed.* The only exception from this rule would be a case, in which a student has legitimate excuses for missing *more than one* exam (see *Attendance* below). If you miss an exam, this exam will automatically become your dropped exam grade. In short, if you miss one of the first two exams or you choose not to take the final exam because the first two exams are good enough for you, you will end up with two exam grades, both of which will count toward your final grade. If you take all *three* exams, only the *best two* exams will count toward your final grade.

d) Research Project: Paper (100 points) and Homework (50 points)

An important part of this course is to conduct a research project. We will work on two broad topics, which will be introduced in our first class meeting. This project is designed to give you personal experience in all the major components of doing research. The key is to learn how to develop testable research hypotheses. In groups of three, you will write a report on our empirical research project. The research paper will be worth a maximum of 100 credit points. Details on your research report will be distributed in class. I will also distribute some homework assignments in class that are directly related to your project (*come to class and check Blackboard for dates and details*). Each group will receive one grade for their research report and therefore every member in the group will receive the same grade for the report.

e) Quizzes (30 points)

You will take 3 quizzes throughout the semester (*see Schedule for dates*). Like your homework assignments, the quizzes will be distributed in class. The quizzes help you understand your own knowledge level in the course, and prepare you for the tests. The quizzes are 10 questions, 1 point each. *Important note:* You cannot make up a quiz! The quizzes will be given at the beginning of class on their due dates.

f) Short Presentations (20 points)

Students are expected to introduce a methodological problem they have been facing in their research (e.g., a measurement issue, or a question regarding a specific design) in their first presentation and to do a short second presentation on a research tool that is not covered in our syllabus (e.g., meta-analysis, modeling, simulations, log-linear models, cluster analysis, focus groups, or a qualitative research method). Both presentations can be done in groups. If they are done in groups, each group will be given one grade and therefore every member in the group will receive the same grade. You can earn as much as 10 credit points for each of your presentations (*see Schedule for dates*).

4) Policy

a) Academic Integrity

The mission of a university can only be accomplished in a place where academic integrity is valued. The code of Student Conduct states that academic dishonesty includes both cheating

and plagiarism. The penalties for academic dishonesty are severe, and I will do all I can to see that violations are severely penalized. *If anyone is determined to have cheated, plagiarized, or misrepresented work in this class, the best he or she can hope is failure in the course. I will additionally recommend to the Department Head or hearing committees that the person be suspended or expelled from the university.* Papers submitted for credit in other classes may not be submitted for credit in this course. You are expected to have full knowledge of the University's Student Conduct Code. A copy of the code may be obtained at the Office of the Dean of Students and Student Services.

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit <http://www.studenthonorcouncil.umd.edu/whatis.html>.

b) Attendance and Due Dates

Attendance will not be graded. However, it will be *impossible* to do well in this course without being in class. You are strongly encouraged to read your readings and think about them. Here are some hints:

- Read ahead of time, and make comments
- Think of interesting examples to share
- Think of important questions to ask
- Come to class prepared.

The University recognizes four legitimate excuses for missing class: illness, religious observance, participation in University activities at the request of University authorities, or compelling circumstances beyond the student's control. These are the *only* circumstances under which you will be allowed to reschedule an assignment due date or an exam (in case you have legitimate excuses for more than one exam). If your absence is due to any of the four types of excused absences listed above you must provide a letter signed by a person in a position to make authoritative determination regarding the validity of the cause of absence, e.g. a doctor in case of illness, university officials regarding campus activities, etc. Permission to turn in a late assignment will be granted *only* if requested at least 24 hours before the assignment is due. In the case of an emergency, it is your responsibility to contact the instructor as soon as physically possible, and no later than three days after the due date/exam date at the latest, or you will earn no points for this assignment.

c) Special Needs

Anyone that needs special considerations (i.e., student athletes, practices, games, travel etc.) must have their schedule approved by the third class session. In addition, any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible so I can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities. You should also contact the Services for Students with Disabilities area of the Office of the Dean of Students at 471-6529 as soon as possible. I will require an official letter outlining authorized accommodations.

5) Tentative Schedule

You are fully responsible for all information in the syllabus, including changes that will be introduced in class throughout the semester. In addition, all relevant pieces of information (including this syllabus, announcements, task assignments, and due dates), will be posted on our Blackboard. It is your responsibility to check Blackboard regularly to stay informed.

This schedule is tentative, and is prone to change if the instructor deems it necessary.

Date	TOPIC	READINGS FROM Gravetter & Forzano	WHAT IS DUE?
Jan 31	Introduction: The research toolbox; Pitfalls of scientific research and ways of knowing: What is a theory, what is a hypothesis?	1, 2	
Feb 7	Defining and measuring variables	3, 13	Presentation I
Feb 14	Research strategies: Descriptive, experimental, and correlational strategy	6 (7)	Presentation I
Feb 21	Descriptive strategy: Survey and observation	13 (5)	
Feb 28	Test I		Test I
Mar 6	Experimental strategy: Between-subjects and within-subjects designs	7 (8, 9)	Presentation II
Mar 13	Experimental strategy: Factorial designs	11	Presentation II
Mar 20	NO CLASSES – SPRING BREAK		
Mar 27	Test II		Test II
Apr 3	Correlational strategy: Mediation vs. moderation	12	
Apr 10	Statistical procedures (descriptives, t-test, chi-square)	Appendix C (15)	
Apr 17	Ethics and research report (APA guidelines)	(4, 16)	
Apr 24	Research project	Additional readings*	Q3
May 1	Research project	Additional readings*	
May 8	Research project	Additional readings*	Research paper
TBA	Test III: Final exam		Test III

*These readings refer to your projects and will be distributed in class or posted on Blackboard.

The research toolbox: Concepts and methods[‡]

I. Methodological concepts

- Theory (explanation, prediction) (1; 3, p. 65)
- Hypothesis (empirical vs. theoretical, falsifiable vs. non-falsifiable) (1)
- Variables (reliability, validity) (1, pp. 17f; 3, pp. 67-75)
 - Definition, operationalization (3, pp. 64-67)
 - Measurement (3)
 - Scales (nominal, ordinal, interval, ratio) (3, pp. 76ff)
 - Observation (coding & interrater-reliability[†]) (13, pp. 324-331; 15)
 - Survey (13, pp. 331-343)
 - Independent, dependent, and extraneous variables (7, pp. 170ff)

II. Research strategies (design, reliability, validity) (6)

- Descriptive strategy (13)
- Experimental strategy (7, 8, 9)
- Correlational strategy (12)

III. Statistical tools (15, appendix B; p. 212, 231, 274-306, 378-402, 414-417, 467-479)

- Descriptives (mean, standard deviation, frequencies, cross tables) (pp. 387-398)
- Correlation (pp. 398-402)
- Chi-square (pp. 417, 478f)
- T-test (repeated-measures vs. independent-measures) (pp. 212, 414f)
- ANOVA (main effect, interaction) (pp. 219, 231, 274-306, 415-417, 467-477)

Major concepts: Reliability, validity, causality, between-subjects vs. within-subjects design, main effect, interaction, significance, (moderation, mediation[†])

Additional topics: Literature search (2), ethics (4), sampling (5), APA rules for writing a report (16), SPSS (Appendix C)

[‡] You should be familiar with the concepts and tools listed here: You should be able to define, describe, and apply each of these tools. The numbers in parentheses refer to your textbook.

[†] We will provide additional materials on these topics in class. Check Blackboard.