

COMM400: Research Methods in Communication
Spring 2008
University of Maryland, College Park
Department of Communication

	Professor:	Graduate TA:	Graduate TA:
Office:	Dr. Torsten Reimer 2114 Skinner	Sabine Fritz 0109 Skinner	Xiaoying Xie 0109 Skinner
Email:	treimer@umd.edu	sfritz@umd.edu	xiex@umd.edu
Office Hours:	Th 3-5 pm or by appt.	Th 10:30 -12:30 or by appt.	Th 10:30 -12:30 or by appt.
Section/Time:	Lecture / 9:30 – 10:20	0104 / 9:00 – 9:50 0105 / 10:00 – 10:50 0106 / 11:00 – 11:50	0101 / 9:00 – 9:50 0102 / 10:00 – 10:50 0103 / 11:00 – 11:50
Location:	CSI 1115	EGR 3140	VHM 2203
Day:	Tuesday & Thursday	Fri	Fri
	Undergraduate TAs:		
Office hours: <i>by appointment</i>	Jennifer Routh jrouth2@umd.edu	Kaitlin Doody kdoody@umd.edu	Abigail Seiler abby8@umd.edu
Dana Davidson ddavidso@umd.edu	Laura Berdichevsky lberdich@umd.edu	Carrie Hubbard chubbard@umd.edu	Lauren Nicholas lnichol4@umd.edu

1) Course Description

This course is designed to introduce you to the basics of quantitative communication research. Scientific discovery is an exciting endeavor. This is particularly true for the study of communication phenomena, which we experience in our daily life. 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.

To accomplish these goals, we will first define some features of communication as a science and discuss in detail basic concepts and methods from the research toolbox that have been used to investigate communication phenomena. Perhaps most important, we will conduct a research project, 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 will be assigned during the semester. These readings will be available on Blackboard at <https://elms.umd.edu>. Instructions on how to access Blackboard will be distributed in class.

3) Grading and Course Requirements

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 test	100
Your second best test	100
Research paper	100
Homework assignments	50
Quizzes	50
Extra credits for research participation	max. 6
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 exams 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. Make-up exams are *only* available in case of excused absences, which have to be provided in advance (in case of religious holidays or athletic events) or within three days after returning to class (in case of documented illness). If you miss one of the first two exams without a legitimate excuse 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 (100 points)

An important part of this course is to conduct a research project. This project is designed to give you personal experience in all the major components of doing research. The key is to learn how research hypotheses can be tested using a research design. In groups of three or four, you will write a report on your empirical project. The research paper will be worth a maximum of 100 credit points. Details on your research project will be distributed in class.

Important note: You will be asked to participate in several studies that are related to our class projects. We will analyze and critically evaluate these studies in class. In addition, every group will sign up for a time slot to collect data. *If you fail to complete these duties, we will subtract 20 points from your course grade!*

e) Homework Assignments (50 points)

There will be 3 homework assignments, worth 10, 20, and 20 credit points respectively (*see Schedule for dates*). All homework will be assigned in your discussion class on Fridays. You are responsible for turning in homework on the assigned due dates (*within the first five minutes of the discussion sections*), we will not accept late homework unless you have a legitimate excuse (*see our policy detailed below*). All assignments, including your homework, need to be stapled.

f) Quizzes (50 points)

You will take 5 quizzes throughout the semester (*see Schedule for dates*). The quizzes help you understand your own knowledge level in the course, and prepare you for our testing style. 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 the class on their due dates. If you miss a quiz, you will earn zero points for this quiz.

g) Research Participation (maximum of 6 extra credit points)

This class participates in the Department of Communication participant pool. We feel it is important to your education that you experience the kinds of events and research that are critical to our department's mission. Thus, *in addition to participating in the research projects we are conducting in class*, you are required to volunteer to be in 1 study of your choice. If you fail to do the additional study by the end of the semester, 10 points will be deducted from your course grade. So, start early, and do not wait until the end of the semester! *After you have completed the mandated 1 study*, you will be given points of extra credit for each research activity you complete with a maximum of 6 points. There are 2 types of studies: ½ hour studies (for example, survey studies) are awarded 1 point, and 1 hour studies (like experiments) are awarded 2 points. These opportunities will be posted online at <http://umcommunication.sona-systems.com>. You should regularly check this online pool for opportunities. Opportunities will occur throughout the semester, and are not guaranteed at any specific time (thus, don't wait until the last minute!). Your instructor will be notified by the researcher that confirms your participation.

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. *If anyone is determined to have cheated, plagiarized, or misrepresented work in this class, we will 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. 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 and attending the discussion sessions on Fridays. If you miss a class or a discussion, it is advisable to get notes for that day from a classmate prior to asking the TAs or your instructor for assistance. You are also 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. 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). 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 or you will earn no points for this assignment. Documentation has to be provided no later than three days after returning to class.

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 us as soon as possible so we 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. We will require an official letter outlining authorized accommodations which also needs to be submitted by the third class session. Retroactive accommodations will not be made.

5) Tentative Schedule

All relevant pieces of information (including this syllabus, announcements, task assignments, and due dates), will be posted on Blackboard. Please, check Blackboard regularly to stay informed.

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

Week of	TOPIC	READINGS FROM Gravetter & Forzano	WHAT IS DUE?
Jan 29	Introduction: The research toolbox		
Jan 31	Pitfalls of scientific research and ways of knowing: What is a theory, what is a hypothesis?	1, 2	
Feb 5	Defining and measuring variables	3, 13	Q1 is on Tuesday, HW1 and group formation on Thursday
Feb 12	Research strategies: Descriptive, experimental, and correlational strategies	6 (7)	Q2 and deadline for joining a group on Thursday
Feb 19	Descriptive strategy: Survey and observation	13 (5)	Signed group contracts and project meetings with instructors
Feb 26	Test I		Test I is on Tuesday HW2 on Friday
Mar 4	Experimental strategy: Between-subjects and within-subjects designs	7 (8, 9)	Q3 on Thursday
Mar 11	Experimental strategy: Factorial designs	11	
Mar 17-21	NO CLASSES – SPRING BREAK		
Mar 25	Catch-up day: Experimental strategy Test II		Test II is on Thursday
Apr 1	Correlational strategy: Mediation vs. moderation	12	Q4 is on Thursday, HW3 on Friday
Apr 8	Statistical procedures (descriptives, correlation, chi-square, t-test)	Appendix C (15)	Q5 on Friday
Apr 15	Research project: Data collection	Additional readings*	
Apr 22	Ethics and research report (APA guidelines)	(4, 16)	
Apr 29	Research project	Additional readings*	
May 6	Research project	Additional readings*	
May 13	Research project	Additional readings*	Research paper on Tuesday
TBA	Test III: Final exam (cumulative) FR, May 16 th , 8 – 10am		Test III

*These readings refer to your project and will be 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.