

## COMM6300 Quantitative Research Methods

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Thursday, 5:30-8:30pm | Room 244

Office Hours: Wed 4pm – 5pm & Thu 4:30pm – 5:30 pm

### Course Overview

COMM 6300, Quantitative Research Methods, is designed to introduce you to the basics of quantitative communication research. As such, it covers essential ideas in theory, hypothesis generation, research design, instrumentation, data collection, and data analysis. Related topics on validity, reliability, and ethical issues in conducting research on humans are also covered.

An important portion of the class is devoted to a survey of univariate (and basic bivariate/multivariate) statistics, which includes topics on the nature of quantitative data, the logic of statistical inference, and various statistical tests such as analysis of variance, regression, and basics of computational text analysis. A set of computer lab assignments will give you extensive opportunity to become familiar with the R programming language, its application to statistical analysis, and computing the various statistics reviewed in the class.

Most importantly, you will conduct a research project, putting into practice the theorizing, design, instrumentation, and analysis skills acquired throughout the class. Thus, this course is designed to provide both a broad overview of the research process and practical experience in conducting quantitative empirical research.

### Course Objectives

1. To increase your knowledge of the principles, objectives, and limitations of behavioral and social science research methods.
2. To expose you to the logic of how people studying human communication come to make sense of what they observe.
3. To provide opportunities for you to experience both the research and analysis processes and critique the research that has been done by others in our field(s).

### Required Textbooks

The following two texts are required to follow this course. You can find the first book online or at UH's library. If the cost of the book is a reason for concern, it is OK for you to purchase (or rent) a copy of the 3<sup>rd</sup> edition of the book.

Wrench, J. S., Thomas-Maddox, C., Richmond, V. P., & McCroskey, J. C. (2019). *Quantitative research methods for communication: A hands-on approach* (4th ed.). New York: Oxford University Press.

Diez, D. M., Barr, C. D., & Çetinkaya-Rundel, M. (2019). *OpenIntro Statistics*. (4<sup>th</sup> Ed.). Available for free at: <https://www.openintro.org/stat/textbook.php>

## Evaluation

You will be expected to complete a variety of in-class activities and take-home lab assignments. The assignments and projects are designed with the course objectives in mind. All readings and assignments should be completed before the class session.

Missed deadlines result in **10% grade reduction** for each day the assignment is late, unless you have a valid reason and have made prior arrangements with me.

### 1. Homework (10 points x 12)

Weekly labs provide you experience at analyzing data, computing statistics, and performing some data-related activities in class. You will learn how to use the R programming language for data management and analysis. **Labs turned in late will not be eligible for credit.**

### 2. Professor Conference (10 points)

Every student is required to meet with me to discuss the progress of your research project. It is your responsibility to contact me in order to set up the time to meet. **You should e-mail me questions and/or rough drafts before we meet, so that we may be able to make the most out of our meeting time.**

### 3. Individual or Team Research Project (200 points)

An important part of this course is to design and conduct a research project. This semester-long process is designed to give hands-on experience in all the major components of conductive quantitative research. **You will have the option to work on this project by yourself independently, or work with another classmate (a group of two the maximum).**

You will write **four “building block” papers** that will be revised into a final paper. I will provide details for these assignments in separate class handouts. Your immediate task is to come up with a topic that interests you, has research significance, and can be studied using one of the methods we’ll discuss over the course (surveys, content analysis, or experiments). If you already have a research proposal written in previous classes, **I strongly suggest developing the proposal into a full research paper.**

### 4. Participation & Attendance (70 points)

This includes coming to class, engaging in class discussion and completing the labs in class.

Homework	12*10 points
Professor Conference	10 points
Research Project	(200 points)
- Building Block Paper #1	30 points
- Building Block Paper #2	30 points
- Building Block Paper #3	30 points
- Building Block Paper #4	30 points
- Final Research Paper	60 points
- Research Presentation	20 points
Participation/Attendance	70 points
<b>Total</b>	<b>400 points</b>

### **Academic Misconduct**

The penalty for misconduct is a grade of “F” on the assignment or for the course, depending on the severity of the infraction. **If you have an issue with a grade please submit your concerns in writing via e-mail so I can make sure to follow-up on your inquiry.** Please keep copies of all of your graded assignments for future discussions.

- You are expected to work **independently** on all assignments unless classified as a “group assignment.” To do otherwise is cheating and will be considered academic misconduct.
- A student observed copying answers from another individual on class assignments (which are not group work) will meet the criteria for academic misconduct.
- If you have questions regarding what comprises academic misconduct or plagiarism, please contact me. **Ignorance of the definition of plagiarism or academic misconduct is not a valid excuse and will not keep a student from being charged.**
- All students are subject to UH’s Academic Honesty Policy and to all other university-wide policies and procedures as set forth in the UH University Catalog and Student Handbook. To review the catalog, visit <http://www.uh.edu/provost/policies/honesty/> and click on *Academic Honesty Policy*.

### **Writing Policy – IMPORTANT!**

All written assignments are to be **typed, double-spaced, 12-point Times New Roman font, in black ink**. Additionally, assignments should be spell-checked and free of grammar errors. All papers must be saved as a PDF. Please follow academic standards when constructing your assignment (this includes, but is not limited to, using introductions, transitions, conclusions, and citing references properly). For additional assistance with writing assignments, please consider making an appointment for a writing consultation with **UH’s Writing and Reading Center**.

### **Attendance**

If you are absent, you will still be responsible for course material and announcements made while you are out. Consult the syllabus, posted readings and assignments, and ask your classmates about any material you missed before contacting me for additional information. Given the topic and pace of this course, class should only be missed for unexpected emergencies. **Please note attendance is part of your course participation grade.**

### **Disability Service**

The University of Houston complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for students with a disability. In accordance with Section 504 and ADA guidelines, UH strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them.

If you believe that you have a documented disability requiring academic adjustments/auxiliary aids, please contact:

Center for Students with Disabilities  
4369 Cougar Village Dr., Room 100  
Office Phone: 713-743-5400

Website: <http://www.uh.edu/csd/>  
Email: [uhcsd@central.uh.edu](mailto:uhcsd@central.uh.edu)

### **Counseling Service**

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS ([www.uh.edu/caps](http://www.uh.edu/caps)) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the “Let’s Talk” program, a drop-in consultation service at convenient locations and hours around campus. [http://www.uh.edu/caps/outreach/lets\\_talk.html](http://www.uh.edu/caps/outreach/lets_talk.html)

### **Writing Center Service**

University of Houston Writing Center offers undergraduate students one-on-one help at any stage of the writing process. UHWC also offers online assistance and computer-based lessons. See their Web page <http://writingcenter.uh.edu/> for details and hours of operation.

**You are strongly recommended to submit your papers to the writing center. They will help review your work via email and will help your performance in the course dramatically.**

## Schedule

<b>Week</b>	<b>Topic</b>	<b>Wrench et al.</b>	<b>Diez et al.</b>	<b>Research Project</b>	<b>Homework</b>
16-Jan	Intro to COMM6300				
23-Jan	From Ideas to Research	4, 5 & 15	1.1, 1.2		HW #1
30-Jan	Measures, variables and hypotheses	6, 7 & 14	2.1, 2.2, 4	Block #1	HW #2
06-Feb	Experiment: Research Design	11	1.4, 2.3, 5		HW #3
13-Feb	Experiment: Data Analysis	8b & 17	7.1, 7.2, 7.3		HW #4
20-Feb	Experiment: Advanced Designs	18	7.4, 7.5		HW #5
27-Feb	Content Analysis: Computational Approaches	12		Block #2	HW #6
05-Mar	Content Analysis: Design & Sampling	10, 13, 8a	1.3, 3		HW #7
12-Mar	SPRING BREAK				
19-Mar	Content Analysis: Data Analysis I	16	6.1 to 6.4		HW #8
26-Mar	Survey: Research Design	9 & 19	8.1		HW #9
02-Apr	Survey: Data Analysis	20	8.2, 8.3 & 8.4	Block #3	HW #10
09-Apr	Survey: Advanced Designs	21	9		HW #11
16-Apr	Social Network Analysis				HW #12
23-Apr	Final Presentations	22		Block #4	
04-May				Full paper	