# COMM 110: Quantitative Methods in Communication Fall 2019

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Office Hours: Monday 2-3 pm, Wednesday 3-4pm, by appointment

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# **Course Description**

Have you ever thought about the relation of quantitative methods and European imperialism? Do you know governmental and business plans and decision making are largely dependent on quantitative methods? Are you aware that your everyday decisions including which product to buy, which college to attend, which candidate to vote for are all impacted by results from quantitative methods?

This course will equip you with knowledge and analytical tools (1) to evaluate results of research that you encounter with at the daily basis, such as results from public opinions polls reported on news media, claims by advertisements, and even statements in everyday conversations and news reporting like: "one study shows that..." or "experts said that..." (2) to develop a scientific way of thinking; (3) to build or improve skills you need for a successful career including using statistical computing software.

We will start with learning the scientific way of knowing and how it is different from other ways of knowing. We'll learn how to effectively use library resources to find communications research that can be of value and to develop good research questions. We will study basic concepts in social science research and learn the three major methodologies in communication research: content analysis, survey, and experiment. Finally we will learn how to use statistical tests to find answers to your questions with SPSS (a basic software for statistical testing).

# **Course Objectives**

This course helps you fulfill learning objectives for the Communication major.

#### **Communication Department**

- 1. Explain, apply, critique, and synthesize communication theories and concepts.
- 2. Apply critical and analytic thinking to mediated and non-mediated messages.
- 3. Analyze how communication shapes patterns of social interaction, the expression of cultural values and norms, or practices that affect relations of power, both locally and globally.
- 4. Analyze the ethical dimensions of communication and form judgments and practices based on evidence and values.

- 5. Demonstrate research skills including the ability to formulate research questions, interpret, and evaluate the quality of communication research.
- 6. Demonstrate the ability to produce and critically reflect on effective oral, written, visual, and mediated communication that is adapted to diverse audiences within multiple contexts.
- 7. Demonstrate the ability to accomplish a variety of interpersonal goals in relationships, groups, and organizations, including developing a compassionate understanding of diverse communication styles and goals of other people (gender, culture, ethnicity, or age).
- 8. Design strategies for how communication can contribute to a more humane, just, or sustainable world.

Here is a summary of what you will learn in this course, how this fulfills the learning objectives, and how we will both know that you learned this material (assessment).

Specific course learning objectives	Fulfils Comm. Dept. Learning Outcomes	How the learning outcome will be assessed during the course
Read and evaluate different methods for conducting empirical communication research.	#1, 5	<ul><li>Exams</li><li>In-class work</li><li>Homework</li></ul>
Identify and understand appropriate statistical methods for testing hypotheses or research questions.	#5	<ul><li>Exams</li><li>In-class work</li><li>Homework</li><li>Research proposal</li></ul>
Critically evaluate scientific research and understand ethical implications of that research.	#1, 2, 4	<ul><li>Exams</li><li>In-class work</li><li>Homework</li><li>Research proposal</li></ul>
Demonstrate knowledge of appropriate research designs and methodologies for empirical research.	#5	<ul><li>Exams</li><li>In-class work</li><li>Homework</li><li>Research proposal</li></ul>
Utilize proper presentation style for literature reviews and statistical findings (APA Style)	#5,6	<ul><li>Exams</li><li>Homework</li><li>Research Proposal</li></ul>

In order to achieve those objectives, you will also need to develop/improve the following skills throughout this course:

- To be able to read scientific-oriented papers.
- To acquire evaluation skills based on theoretical knowledge.
- To improve presentation skills.
- To develop skills to collaboration with and learn from others.
- To develop skills for statistical computing/analysis.

# **Prerequisites**

Successful completion of Comm 1, Comm 2, and at least 88 units

# **Textbook**

<u>Quantitative Research Methods for Communication</u> by Jason Wrench, Candice Thomas-Maddox, Virginia Peck Richmond, & James C. McCroskey. Fourth EDITION

# **Grading**

The assignments are designed to assure you attain the knowledge and skills listed above and thus achieved the learning objectives of this course. Your performance in this course will be evaluated based on the following assignments:

Assignment	Percentage	Points	<b>Due Date</b>
Class Participation	2%	10	
Homework/In-class activity/quizzes/peer	18%	90	
review			
Research Proposal			
Building Block 1	10%	50	
Building Block 2	10%	50	
Building Block 3	10%	50	
Building Block 4	10%	50	
Midterm Exam	20%	100	
Final Exam	20%	100	
Total	100%	500	

Your course grade, expressed in letters, is determined for each student according to the following cutoffs on the overall mastery level:

Percentage (points)	Grade	Percentage (points)	Grade
97% (485-500)	A+	77% (385-399)	C+
94% (470-484)	A	74% (370-384)	C
90% (450-469)	A-	70% (350-369)	C-
87% (435-449)	B+	67% (335-349)	D+
84% (420-434)	В	64% (320-334)	D
80% (400-419)	B-	60% (300-319)	D-

# **Research Proposal**

The main project for this course will be the completion of a research proposal. The research proposal will be completed in stages called "Building Blocks." The final paper will include an

introduction, research rationale, testable hypotheses, and a methods section. Detailed instruction sheets will be available in Camino, along with examples. You will be peer-reviewing your classmates' papers as part of the learning and improvement process.

**Building Block I: Idea Generation:** In this first assignment, you will generate some ideas and some broad communication-based questions that you would like to explore throughout the quarter. From there, you will summarize and synthesize peer-reviewed research articles to help start building an argument that will carry you through the rest of the building blocks.

**Building Block II: Focused Outline**: For this assignment, you will select a final topic area and research question. Using published research, you will outline a rationale (a specific argument leading to some hypotheses). You will use the published research to support your arguments. At the end of this assignment, you will conceptualize (define) and identify your independent and dependent variables and develop 2 testable hypotheses.

**Building Block III: From Outline to Argument -- the Rationale.** For this assignment, you will narrow in your topic even more and provide an in-depth rationale leading to specific hypotheses and research questions. For most students, this is the most difficult part of the project, as it can be hard to come up with specific hypotheses that are developed for a synthesis of existing research. I will try to be thorough in providing my feedback on your assignments leading up to this one, but I also recommend meeting with me to discuss your ideas.

**Building Block IV: Final Research Project Proposal:** This is the final assignment and will be due at the end of the quarter. Based on your rationale and your hypotheses/research questions, you will propose a detailed methods section indicating the type of methods (study design/statistical tests) you will use to test your hypotheses.

# \*\*ALL FOUR PARTS OF THE RESEARCH PROPOSAL PROJECT MUST BE SUBMITTED. IF YOU DO NOT SUBMIT ALL PARTS, YOU WILL EARN AN 'F' IN THE COURSE, REGARDLESS OF YOUR TOTAL COURSE GRADE\*\*

\*\*You may revise your ideas from assignment to assignment. I will provide feedback to you so you can revise the assignment to improve the ideas for each subsequent assignment. I will grade each assignment as a new one, so if your ideas have changed based on my feedback/your own thinking, that is ok, and is highly encouraged.\*\*

All papers must be submitted in .doc, .docx, or .pdf formats and should be formatted in APA 6th Edition Style and uploaded to Camino. Other formats will not be accepted and graded. Students are responsible for ensuring that their paper has in fact been submitted. Give yourself plenty of time to submit the paper. Technical malfunctions are not an excuse for late papers.

When outside sources are used in a paper, students will be expected to reference these sources properly. Any type of plagiarism will result in a 0 for the assignment and could result in further sanctions from the university.

Related to the above, please be protective of your papers. It is your responsibility to make sure that your paper does not end up in the hands of someone who might plagiarize it. If your paper is

copied by someone from this class, you will be subject to the same penalties as the student who copied it. If parts of your paper are copied by someone in a future quarter of COMM 110, you will still be subject to university sanctions according to the academic misconduct code.

No rewrites of any paper will be allowed. If you are having a problem with a particular paper assignment, or you want to make sure that you're on the right track, please feel free to meet with me before the paper is due to ask questions. Note that this puts a premium on starting early...if you wait until the last minute you may not have a chance to meet and work out any problems you might have.

Assignments are due at **8am** on the due date. 1/3 of the points will be deducted from the overall assignment score for every 24 hours the assignment is late.

#### **Exams**

Makeup or conflict exams will be given only for university-approved reasons. If a conflict exam is required, let me know as soon as possible to make arrangements. Please note the dates of the exams and make your travel plans accordingly.

The exams will cover material presented in class (including guest speaker lectures!), homework activities, multimedia presentations, and assigned readings and will include true/false, multiple-option, matching, short answer, and statistical calculations (where appropriate). More information about the format of the test will be presented in class as the exam gets closer. Note that the lectures include material not available in the readings and vice versa. You are responsible for any in-class material that you miss.

The exams will not be cumulative. However, since there are some concepts and ideas that recur during the term, you are responsible for recognizing and being able to apply them throughout. If you are registered with Disabilities Resources, please inform me early in the quarter about your approved accommodations.

#### **Quizzes**

Quizzes will be posted weekly. They will help you review information you learned throughout each week and keep up with the course. Quizzes should be completed before coming to classes. We will review some quiz questions in class so no credit for quizzes taken after the due date/time.

# **Late Work & Grade Discussions**

1/3 of the points will be deducted from the overall assignment score for every 24 hours the assignment is late.

Grades on assignments may be discussed. If you believe a grade you received should be amended you will need to present a formal, written argument in a MS word document at least one day after <u>but no more than one week after the grade was received</u>. **Final course grades are not debatable**.

# **Other Classroom and Learning Policies**

#### Devices in the Classroom

Distracting yourself and those around you by using the computer or a phone to view material unrelated to this course during class time will not be tolerated.

#### Communication

#### With me:

I would appreciate if you could email me in advance for office-hour visits. This will avoid you and your classmates waiting outside my office, and most importantly save your time and assure your questions will be fully answered. If those hours do not work for you, we can arrange for an alternative meeting time.

I will respond to your email within 24 hours. If you don't hear back from me within 2 days, please email me with a reminder.

#### With you:

I will send out announcements throughout Camino regularly. Please check your Camino regularly, or as I recommend, you can set the Announcements to be sent to your email under Camino – Account (on the up left corner) – Notifications – set Announcement as "Notify me right away".

#### Preparing for the class

You should read/watch the assigned materials before coming to class, to help you better digest lecture content and facilitate classroom discussion.

#### Attendance / Class Participation

We will not do roll-call attendance. But again, if you miss a class for any reason, you are responsible for any material presented and discussed in class. Missed notes and assignments must be obtained from another student and by checking the Camino site. No in-class work can be made up unless your absence was the result of intercollegiate athletic travel or illness for which a doctor's note is required.

# Classroom Etiquette

We share our classroom with others, so please do not change settings on the computers or store your work on them.

To protect the computers, the Communication Department bans food and drink from our classroom. Thank you for leaving open containers outside the door and sealing up water bottles before entering class.

# **University Policies**

# **Academic Integrity**

The Academic Integrity pledge is an expression of the University's commitment to fostering an understanding of -- and commitment to -- a culture of integrity at Santa Clara University. The Academic Integrity pledge, which applies to all students, states:

I am committed to being a person of integrity. I pledge, as a member of the Santa Clara University community, to abide by and uphold the standards of academic integrity contained in the Student Conduct Code.

Students are expected to uphold the principles of this pledge for all work in this class. For more information about Santa Clara University's academic integrity pledge and resources about ensuring academic integrity in your work, see <a href="https://www.scu.edu/academic-integrity">www.scu.edu/academic-integrity</a>.

# Office of Accessible Education (formerly Disabilities Resources)

If you have a documented disability for which accommodations may be required in this class, please contact the Office of Accessible Education (Benson 1, <a href="http://www.scu.edu/oae">http://www.scu.edu/oae</a>, 408-554-4109) as soon as possible to discuss your needs and register for accommodations with the University. If you have already arranged accommodations through OAE, please discuss them with me during my office hours within the first two weeks of class.

To ensure fairness and consistency, individual faculty members are required to receive verification from the Office of Accessible Education before providing accommodations. OAE will work with students and faculty to arrange proctored exams for students whose accommodations include double time for exams and/or assistive technology. Students with approved accommodations of time-and-a-half should talk with me as soon as possible. The Office of Accessible Education must be contacted in advance (at least two weeks notice recommended) to schedule proctored examinations or to arrange other accommodations.

# **Accommodations for Pregnant and Parenting Students**

In alignment with Title IX of the Education Amendments of 1972, and with the California Education Code, Section 66281.7, Santa Clara University provides reasonable accommodations to students who are pregnant, have recently experienced childbirth, and/or have medical needs related to childbirth. Pregnant and parenting students can often arrange accommodations by working directly with their instructors, supervisors, or departments. In addition, the Office of Accessible Education will provide reasonable accommodations for pregnancy-related impairments which impact a major life activity.

#### **Discrimination and Sexual Misconduct (Title IX)**

Santa Clara University upholds a zero-tolerance policy for discrimination, harassment and sexual misconduct. If you (or someone you know) have experienced discrimination or harassment, including sexual assault, domestic/dating violence, or stalking, I encourage you to tell someone promptly. For more information, please consult the University's Gender-Based

Discrimination and Sexual Misconduct Policy at <a href="http://bit.ly/2ce1hBb">http://bit.ly/2ce1hBb</a> or contact the University's EEO and Title IX Coordinator, Belinda Guthrie, at <a href="https://www.scu.edu/osl/reports">408-554-3043</a>, bguthrie@scu.edu. Reports may be submitted online through the Office of Student Life <a href="https://www.scu.edu/osl/reports">https://www.scu.edu/osl/reports</a> or anonymously through EthicsPoint <a href="https://www.scu.edu/hr/quick-links/ethicspoints/">https://www.scu.edu/hr/quick-links/ethicspoints/</a>

# My Responsibilities to Report

While I want you to feel comfortable coming to me with issues you may be struggling with or concerns you may be having, please be aware that there are some reporting requirements that are part of my job at Santa Clara University.

For example, if you inform me of an issue of harassment, sexual violence, or discrimination, I will keep the information as private as I can, but I am required to bring it to the attention of the institution's EEO and Title IX Coordinator. If you inform me that you are struggling with an issue that may be resulting in, or caused by, traumatic or unusual stress, I will likely inform the campus Student Care Team (SCU CARE).

If you would like to reach out directly to the Student Care Team for assistance, you can contact them at <a href="www.scu.edu/osl/report">www.scu.edu/osl/report</a>. If you would like to talk to the Office of EEO and Title IX directly, they can be reached at 408-554-3043 or by email at bguthrie@scu.edu. Reports may be submitted online through www.scu.edu/osl/report or anonymously through Ethicspoint:
<a href="www.ethicspoint.com">www.ethicspoint.com</a>. Additionally, you can report incidents or complaints to the Office of Student Life (OSL), Campus Safety Services, and local law enforcement. For confidential support, contact the Counseling and Psychological Services office (CAPS), the YWCA, or a member of the clergy (for example, a priest or minister).

Finally, please be aware that if, for some reason, our interaction involves a disruptive behavior, a concern about your safety or the safety of others, or potential violation of University policy, I will inform the Office of Student Life. The purpose of this is to keep OSL apprised of incidents of concern, and to ensure that students can receive or stay connected to the academic support and student wellness services they need.

# **In-Class Recordings**

The <u>Student Conduct Code</u> (p. 13) prohibits students from "(m)aking a video recording, audio recording, or streaming audio/video of private, non-public conversations and/or meetings, inclusive of the classroom setting, without the knowledge and consent of all recorded parties," except in cases of approved disability accommodations. The Student Conduct Code also prohibits the "falsification or misuse, including non-authentic, altered, or fraudulent misuse, of University records, permits, documents, communication equipment, or identification cards and government-issued documents." Dissemination or sharing of any classroom recording without the permission of the instructor would be considered "misuse" and, therefore, prohibited. Violations of these policies may result in disciplinary action by the University. At the instructor's discretion, violations may also have an adverse effect on the student's grade.

#### **Course Schedule**

<sup>\*\*\*</sup>Pay attention to chapter titles. Each edition is slightly different.

Date	Topic	Reading	Project Due
Week 1 Introduction to	-		, J
M 9/23	Introduction Day	Syllabus	
	-		
W 9/25	Intro to scientific	Textbook: Chapter 2	
	method (Prof. Heintz)	Empirical Research	
F 9/27	NO CLASS	Textbook: Chapter 1	
	(Prof. Han in D.C. for	Intro to comm	
	conference)	Textbook: Chapter 4	
		APA style (Step 5)	
		Purdue APA link	
	ics and Find Your Resea		
M 9/30	Introduction of	00 Cosby (PDF)	
	Science and	BB1 assignment	
	communication	reading	
	science		
	Dagaarah muanagal		
	Research proposal Overview		
	Overview		
W 10/2	Research Ethics	Textbook: Chapter 3	
, , , , , , , , , , , , , , , , , , ,		Research Ethics	
F 10/4	From ideas to	Textbook: Chapter 4	
	research questions	(Step 1 and 2)	
	1	Searching for	
	BB1	previous research	
		01 Writing a research	
		proposal (PDF)	
Week 3 Developing Research Hypotheses			
M 10/7	Literature searching	Textbook: Chapter 4	
	and reading	(Step 3 and 4)	
		Searching for	
TT 10/0		previous research	
W 10/9	Developing	Textbook: Chapter 5	
	hypotheses	Research structure	
		and literature review	

<sup>\*</sup>This schedule is subject to change

<sup>\*\*</sup>The due dates here are only for your research proposal project. Homework/in-class activity/quizzes due dates will be posted on Camino.

F 10/11	Variables	Textbook: Chapter 6 Variables	
Wee 4 Operationalization			
M 10/14	Conceptualization	BB2 assignment	BB1 Due (8AM)
141 10/14	and	reading	DD1 Duc (0/11/1)
	operationalization	reading	
W 10/16	Measurements	Textbook:	
VV 10/10	Wiedsarements	Measurement	
F 10/18	Reliability and	Textbook: Reliability	
1 10/10	Validity	and Validity	
Week 5 Mid-term Exa	m and Hypothesis Testin		
M 10/21	Midterm review		
W 10/23	Mid-term Exam		
F 10/25	Hypothesis testing	Textbook:	
	7 F8	Hypothesis testing	
Week 6 Survey and C	ontent Analysis	71	
M 10/28	Content analysis 1	Textbook: Content	
	J	analysis	
W 10/30	Content analysis 2	BB3 assignment	
	J	reading	
F 11/1	Survey 1	Textbook: Survey	
		Research	
Week 7 Content Analy	vsis and Experiment		
M 11/4	Survey 2	Textbook: Sampling	BB2 Due (8AM)
		methods	, ,
W 11/6	Experiment 1	Textbook:	
		Experimental Design	
F 11/8	Experiment 2		
Week 8 Data Analysis	I: Basic Concepts		
M 11/11	Statistical	02 Statistical	
	significance	significance (PDF)	
W 11/13	Descriptive statistics	Textbook:	
		Descriptive statistics	
F 11/15	Introduction to data	TBA	
	analysis		
	II: Group Comparisons		
M 11/18	Chi square test	Textbook: Chi square	BB3 Due (8AM)
		test of independence	
W 11/20	t-test	Textbook:	
		Independent sample	
		t-tests	
F 11/22	ANOVA	Textbook: One way	
	<u> </u>	analysis of variance	
Thanks giving break			
Week 10 Data Analysi	s III: Associations and C	ausalities	

M 12/2	Correlation &	Textbook:	Peer review for BB3	
	regression	Correlation &	Due (8AM)	
		Regression		
W 12/4	Data analysis & BB4			
	workshop			
F 12/6	Final exam review			
Week 11 Final Exam and BB4 Due				
M 12/9	Final Exam 1:30pm-4:30pm Room: TBA			
W 12/11			BB4 DUE (8am)	