

**School of Communication
University of Miami**

STC 103

Statistical Reasoning for Strategic Communication

Section C, MWF 10:10–11:00am, Wolfson 3040

Fall 2022

Instructor: Zixiao Yang

Office Hours: M/W 11:05—12:05am or by appointment

Office Location: CIB 5051-01

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SYLLABUS

Course Description and Purpose:

The main purpose of this course is for students to understand the meaning of outcomes in quantitative research studies in the field of strategic communication. This course introduces students to statistical reasoning by providing fundamental knowledge of how quantitative data, statistical procedures, and basic analyses are used in academia and industry in the field of strategic communication. It emphasizes on providing a conceptual understanding rather than the details of formulas and computation. This course also teaches students to utilize SPSS, a convenient software for statistical analyses.

By the end of this course, students will be able to:

- Identify data according to type and level;
- Identify and apply appropriate statistical procedures for different research questions and hypothesized relationships;
- Enter data and run basic statistical procedures (e.g. t-test, ANOVA, correlations, regression) in SPSS;
- Interpret and present quantitative results based on appropriate statistical analyses for strategic communication (public relations and advertising) outcomes.

Course Prerequisites:

MTH 101, or

ALEKS score of 65 or higher, or

Math SAT score greater than 650, or

Math ACT score greater than 28.

Required Software:

IBM SPSS Statistics is required for this course. The software is available on the University of Miami's Information Technology webpage. You can download SPSS Premium Statistics 28 (Windows and Mac) via this link:

<https://my.it.miami.edu/wda/a-z/spss-statistical-package/index.html>

Recommend materials:

Field, A. (2017). *Discovering statistics using SPSS* (5th ed.). Sage Publications.

Grading/Evaluation:

Grades will be based on points accumulated on homework, quiz, exam and attendance and participation. There will be 100 total possible points, distributed as follows:

	<u>Percent of grade</u>
Homework (6)	30% (120 points total; 20 points each)
Quiz (6)	15% (60 points total; 10 points each)
Exam 1	15% (60 points)
Exam 2	15% (60 points)
Final Exam	20% (80 points)
Attendance and Participation	5% (20 points)

Grading Scale:

A+ = 97% and above	C+ = 77-79.9%	below 60% = F
A = 94-96.9%	C = 74-76.9%	I = incomplete
A - = 90-93.9%	C - = 70-73.9%	
B+ = 87-89.9%	D+ = 67-69.9%	
B = 84-86.9%	D = 64-66.9%	
B - = 80-83.9%	D - = 60-63.9%	

Assignments/Coursework:

Homework assignments (30%)

Students are expected to complete **six homework** assignments. These assignments are critical for your learning experience and are necessary for you to really understand and conduct statistical analysis covered in lectures. **All homework assignments are expected to be submitted to the Blackboard at the beginning of the class on the scheduled dates** (see course topics outline for details). Each homework assignment has 20 points in total. **Late submission will result in a deduction of 5 points per day (24 hours)**. Furthermore, students must submit an assignment **within two days** (48 hours) of original due date to receive partial points for the assignment. **NO points** will be given after two days of the original due date. If you will be absent on the day an assignment is due, you should notify the instructor in advance and submit the homework by the due date.

Please write your full name and C-number on each assignment. Grades are NOT negotiable. If you have any questions about the grading, please contact the instructor within one week after I post your grade on Blackboard. Please make sure to back up all your homework because they will be critical in preparing for the exams.

Quizzes (15%)

To provide additional measures of students' knowledge and retaining of reading materials, **six in-class quizzes** will be given over the course of the semester (see detailed dates in the course topics outline). Quizzes are taken at the beginning of the class. No "cheat sheet" will be allowed and students MUST complete the quizzes independently. Please note that **NO POINTS** will be given if you fail to complete your in-class quizzes. If a student is unable to take any of quizzes due to any reasons, please notify the

instructor PRIOR to the scheduled date of the quiz. **Make-up quiz will only be permitted at the discretion of the instructor.** If you take make-up quiz, you could only receive 80% of your original grade. Missing a quiz without a proper notice will result in receiving 0 point on the quiz. Students have the responsibility to check their Blackboard and UM emails and to arrive on time for quizzes.

Exams (50%)

There will be **three exams** to test students' knowledge of the lectures offered, readings assigned, as well as any handouts or PowerPoint presentations provided throughout the semester. Each student is allowed to bring one A4 page of cheat sheet (double-sided). **No extensions/make-ups will be given, unless having a legitimate, written, and documented reason is submitted PRIOR to the examination date.** If you cannot take these exams, you should not take this class. Please check your calendar now! More details will be made available as the exams draw near.

Performance evaluation (5%)

Students will be evaluated based on their attendance and performance throughout the semester. Being on-time, actively involved in class, and keeping a positive attitude are key to higher performance evaluation scores.

Class Policies:

Attendance policy:

You are allowed **three absences** in this class without penalty. However, regular class attendance is essential for success in this course as each class may include in-class exercise that is supplemental to information in the lecture material. If you miss class, you are expected to get the notes from your classmates. Office hours will not be an opportunity to review a lecture or PowerPoints that you missed. **Each absence beyond three will result in a 5-point deduction in your final grade. If you are tardy, you will be counted as absent for that day.** Students should submit their homework assignments via email to the instructor prior to the class they miss if they are supposed to turn in their homework on that day.

Absences are neither excused nor unexcused. Put another way, you should use your allotted absences wisely. If you squander these absences during the semester and then experience some personal exigency (e.g., illness, family emergency, field trip through the legal system), these absences beyond three will still result in the attendance deduction per day. Again, it is your responsibility to determine what was missed and to hand in any work or to do any readings that were announced during your absence. I won't be taking notes from doctors because you were sick. Those sick days are part of your three absences. If you are sick "after" your three free absences, those missed classes still count as absent.

Late work policy:

You should turn in your assignments on time. Late submission will result in a deduction of 5 points per day late if turned in after the class meeting time (including the first day). Please be aware, if you turn in an assignment after two days of the original due date, you will get no points!

Office hours:

If you have concerns about your performance in the class as the semester progresses, please do not hesitate to contact me during my office hours. Do not wait until the end of the semester to ask for help or to explain unusual circumstances that have affected your grade. At that point, it will be too late.

General courtesy:

Students are expected to treat one another and the professors with respect. Respect is conveyed in many forms, not all of which will be discussed in the syllabus. Refrain from any form of electronic communication (email, texting, IM, etc.). Please silent or deactivate your cell phones during class. Students should plan on staying the entire class session. Don't read the newspaper or talk to other people while the professor is lecturing during class; do not study for another class. If a student is disrespectful by these terms, then the student may be asked to leave (and receive an absence).

UNIVERSITY EMAIL AND BLACKBOARD:

Students will be notified via UM emails and Blackboard announcement for any changes of this course. Students are responsible to check their UM emails and Blackboard before each class for any changes and/or notice. **Lecture material will be shared via Blackboard.**

STUDENT WITH DISABILITIES:

The Office of Disability Services (ODS) at the Academic Resource Center is here to help you if you have a physical or learning disability. If you anticipate the need for special accommodations to complete the course requirements, **please register with ODS and obtain a "letter to professor" to notify me within two weeks of receiving this syllabus.** I will try my best efforts to assist you. You may choose not to disclose a disability but it is your responsibility to register with ODS and to notify me of your condition if you request special accommodations.

Religious Holy Day Policy:

It is the student's obligation to provide faculty members with notice of the dates they will be absent for religious holy days, preferably before the beginning of classes but no later than the end of the first three (3) class days. Absences due to observance of religious holy days not pre-arranged within the first three class days may be considered unexcused and there is no obligation to allow any make up work, including examinations. Missing a class due to travel plans associated with a particular religious holy day does not constitute an excused absence. The University's complete Religious Holy Day Policy can be found in the current *UM Bulletin*.

Honor Code and Plagiarism Statements:

Students enrolled in this course are expected to abide by the University of Miami Honor Code. The purpose of the Honor Code is to protect the academic integrity of the University by encouraging consistent ethical behavior in assigned coursework. Academic dishonesty of any kind, for whatever reason, will not be tolerated.

No honest student wants to be guilty of the intellectual crime of plagiarism, even unintentionally. Therefore, we provide you with these guidelines so that you don't accidentally fall into the plagiarism trap.

Plagiarism is the taking of someone else's words, work, or ideas, and passing them off as a product of your own efforts. Plagiarism may occur when a person fails to place quotation marks around someone else's exact words, directly rephrasing or paraphrasing someone else's words while still following the general form of the original, and/or failing to issue the proper citation to one's source material.

In student papers, plagiarism is often due to...

- Turning in someone else's paper as one's own
- Using another person's data or ideas without acknowledgment
- Failing to cite a written source (printed or internet) of information that you used to collect data or ideas
- Copying an author's exact words and putting them in the paper without quotation marks
- Rephrasing an author's words and failing to cite the source
- Copying, rephrasing, or quoting an author's exact words and citing a source other than where the material was obtained. (For example, using a secondary source which cites the original material, but citing only the primary material. This misrepresents the nature of the scholarship involved in creating the paper. If you have not read an original publication, do not cite it in your references as if you have!)
- Using wording that is very similar to that of the original source, but passing it off as one's own.

The last item is probably the most common problem in student writing. It is still plagiarism if the student uses an author's key phrases or sentences in a way that implies they are his/her own, even if s/he cites the source.

UM Academic Integrity Policy

Students in this and all UM courses are bound by the University's Academic Integrity Policy. The policy can be reviewed at:

<https://fs.miami.edu/assets/pdf/facultysenate/Documents/academic-integrity-policy-final-changes-accepted.pdf>

Well-Being Resources and Support

As you complete your coursework, consider how you can maintain your health and well-being as a top priority. To help you become familiar with the many programs and services available on campus, review the information collected on the Division of Student Affairs Student Well-Being and Resiliency website available at www.miami.edu/well-being. Please reach out to any of the resources on the site if you need support throughout the semester.

COVID-19 Guidelines

Testing. Students attending for the fall semester are also **strongly encouraged** to take a COVID-19 test at home within 72 hours before arriving to campus. If a student tests positive, the student should remain at home and isolate based on guidelines from the Centers for Disease Control and Prevention. Testing is an important tool, which should be utilized to protect one's health and the health of those we come in contact with while traveling or socializing on campus.

Isolation and Quarantine. The University will follow CDC guidelines, with individuals who test positive expected to shelter in place.

Vaccinations and Boosters. Students are **strongly encouraged** to be vaccinated and boosted against COVID-19 to protect their health and the health of others.

Masking. Because Miami-Dade County is currently experiencing a high level of community risk for COVID-19, the University **encourages** masking indoors, including classrooms, especially for individuals with underlying medical conditions.

Course Topics Outline (NOTE: Dates and assignments are subject to change depending on our progress during semester. Students must check UM emails and course Blackboard for any notifications.)

Week	Date	Topic	Notes
1	8/22	Introduction & Expectations	
	8/24	Introduction to Statistics and Research	
	8/26	Variables, Population, and Sampling	
2	8/29	Measurement	
	8/31	Levels of Measurement	
	9/2	Reliability & Validity	Quiz#1
3	9/5	No class (Labor Day)	
	9/7	SPSS Introduction	
	9/9	SPSS Practice for reliability	
4	9/12	Describing distributions (1)	
	9/14	Describing distributions (2)	HW#1 due
	9/16	Describing distributions SPSS Practice	
5	9/19	Population & Sample/ Statistical distribution	
	9/21	Normal Distribution	
	9/23	Z-Scores	Quiz#2
6	9/26	Hypothesis testing (1)	
	9/28	Hypothesis testing (2)	
	9/30	Review for Exam 1	HW#2 due
7	10/3	Exam#1	
	10/5	Exam#1 answers	
	10/7	Independent-samples <i>t</i> -test	
8	10/10	Dependent-samples <i>t</i> -test One-sample <i>t</i> -test	
	10/12	<i>t</i> -test SPSS Practice	Quiz#3

	10/14	No class (Fall Recess)	
9	10/17	One-way ANOVA (1)	HW#3 due
	10/19	One-way ANOVA (2)	
	10/21	One-way ANOVA SPSS Practice	
10	10/24	Review t-test & One-way ANOVA	
	10/26	Multiple factor (two-way) ANOVA	
	10/28	Multiple factor (two-way) ANOVA SPSS Practice	Quiz#4
11	10/31	Review for Exam 2	
	11/2	Exam#2	
	11/4	Exam#2 answers	
12	11/7	Analysis of correlation	
	11/9	Correlation SPSS Practice	HW#4 due
	11/11	Simple linear regression	
13	11/14	Single linear regression SPSS practice	Quiz#5
	11/16	Correlation & Simple linear regression exercise	
	11/18	No class (NCA conference)	
14	11/21	Multiple regression (Remote Session)	HW#5 due
	11/23	No class (Thanksgiving Recess)	
	11/25		
15	11/28	Multiple regression SPSS Practice	Quiz#6
	11/30	Final SPSS Practice	HW#6 due
	12/2	Final review	
16	12/5	Final review	
	12/15 (Friday) Final Exam: 11: 00 am – 1:30 pm		

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Tear off and return with information required below:

Student Acknowledgement:

I have received and read the syllabus for STC 103-Section C, for the Fall semester 2022.
I have completed the prerequisite courses listed in the syllabus or have had the professor
sign below to certify a waiver of the prerequisites.

Signed: _____

Print Name: _____

Date: _____

Professor Prerequisite Waiver (If Needed)_____