PSY 315 — Statistics for Psychological Research

Fall 2026 · St. Joseph's University, New York · Professor Magee

Meetings	Tuesdays & Thursdays, 1:40–3:05 PM · Room MCE 402 (computer lab)
Instructor	Michael Magee, Ph.D.
Office	Lorenzo Hall (top floor)
Office hours	By appointment, in person or Zoom
Email	mwmagee@sjny.edu
Prerequisite	PSY-100 and MAT-151
Credits	3

Welcome — statistics is not math (it just uses some)

Let's get the scariest myth out of the way first: **this is not a math class.** Statistics *uses* arithmetic — and none of it is harder than eighth-grade algebra — but the real skill is **thinking**: knowing which number answers your question, running it, and saying what it means in plain English. You'll do every calculation in **Google Sheets**, the same way real researchers do, so we spend our energy on understanding instead of on long-hand arithmetic. By the end of the semester you'll take raw data and carry it all the way to a real analysis — the kind you'll use in Research Methods and beyond.

What you'll be able to do

By the end of this course you will be able to:

- Organize and summarize data with tables, graphs, and the right kind of average.
- Measure how spread out data is, and standardize scores using the normal curve (z-scores).
- Describe relationships between variables with correlation and regression.
- Explain sampling, the Central Limit Theorem, and the logic of hypothesis testing.
- Run and interpret **t-tests** and **ANOVA** (including two-way ANOVA with interactions) in Google Sheets.
- Choose the correct analysis for a question and communicate the result clearly.

Materials — nothing to buy

- **Free unit readings** posted on the course website — **coolpsychology.com/psy315** (written for this course — short and clear). The site also has an **ungraded practice quiz** for every unit.
- **The class dataset** — the *SJNY Student Life* dataset lives in Google Sheets: open the student dataset. The master is **view-only**: on Day 1 you'll open it, sign in with your SJNY Google account, choose **File → Make a copy**, and name your copy **"PSY 315 –**

Last, First”. All semester work happens in *your* copy — never in the master; if yours ever gets hopelessly tangled, just make a fresh copy. (Exams are separate: for each exam I share an individual sheet with you from my account.) The dataset is also the “Dataset” pill at the top of every page on the course site.

- **Google Sheets** (free through your SJNY account; used in every class).
- *Optional reference:* OpenStax *Introductory Statistics 2e* (free PDF) for students who want extra examples.

You’ll work on a lab computer every class, so there is **no textbook to purchase** and nothing to print.

How your grade works

Almost everything is **auto-graded on Canvas**, and the low-stakes work is designed to reward students who simply show up and keep up.

Component	Weight	Notes
4 in-class exams	50%	Hands-on; you analyze real data in Google Sheets
Weekly T/F quizzes	25%	Short, auto-graded; two lowest dropped
Multiple-choice tests	20%	A few across the term; lowest dropped
Citizenship (attendance)	5%	See policy below

Grading scale: A = 90–100% · B = 80–89% · C = 70–79% · D = 60–69% · F = below 60%

Weekly T/F quizzes (25%)

Before almost every class, a short true/false quiz on the **previous** class’s material is due on Canvas. They’re quick, they keep you current, and they’re the easiest points in the course. Your **two lowest quizzes are dropped**, so a couple of rough weeks won’t hurt you.

Multiple-choice tests (20%)

A handful of slightly tougher, auto-graded tests (with some light calculations) that pull a whole block of material together. Your **lowest test is dropped**.

In-class exams (50%)

Four exams across the semester (not cumulative). You’ll use Google Sheets to analyze a dataset, make a graph, and interpret the result — exactly what we practice in class. There is **no final exam**.

How exam Sheets work: I create your exam Google Sheet and share an individual copy with you **from my own account**, so the file lives in my Drive and I retain access to it —

including its full edit history. Work *only* in the copy I share with you; please don't make your own or share it with anyone. This keeps everyone honest and lets me see your real work.

Citizenship — attendance (5%)

You begin the semester with the **full 5%**, and simply attending protects it. You may miss **three classes with no penalty**. Beginning with your **fourth absence, each absence deducts 2% from your final course grade**. **Three late arrivals count as one absence.** Because this course is hands-on and cumulative, missing class is the single biggest predictor of a low grade — please come.

Extra credit

- **Perfect attendance** (no absences and no lates) earns **+2%** added to your final grade.
- **Finals-week statistics game:** instead of a final exam, we meet during finals week for a team game; your team can earn additional extra credit.

Policies

Late & make-up work. Quizzes and tests have generous Canvas windows, so plan ahead — **nothing is accepted late** (miss the deadline, miss the points; your dropped scores are your cushion). Exam make-ups are granted only for documented emergencies.

Academic integrity. You'll use Google Sheets for all analysis — that's expected and encouraged. But quizzes, tests, and exams are **your own individual work**; having another person or an AI tool answer them for you is a violation of SJNY's academic-integrity policy and is treated seriously. Any work crafted by AI tools in unauthorized ways — even in part — will be treated as plagiarism under SJNY academic integrity policies: a report to the Academic Dean and a zero for the assignment; a repeat infraction means failure of the course. If any part of this is confusing or uncertain, please reach out for a conversation before submitting your work. For exams you work in the individual Google Sheet I share with you from my account, and I retain access to it (including its version history).

Getting help. If something doesn't click, ask early — this material builds on itself. Use class time and office hours; I'm always glad to walk through something again.

Accessibility. St. Joseph's University provides reasonable accommodations for documented disabilities. Contact the **Office of Student Accessibility Services, Brooklyn Campus** — McEntegart Hall, Room 300A · Coordinator Hannah Singer · 718.940.5859 · hsinger@sjny.edu. If you have an accommodation letter, please share it with me early so we can set things up. It is the student's responsibility to communicate with faculty, and all information is kept confidential.

Wellness. If you're dealing with academic stress, difficult life events, or feelings like anxiety or depression, please reach out — asking for support sooner rather than later

almost always helps. The **Office of Counseling and Wellness (Brooklyn)** is here for you: 718-940-5853 · bkwellness@sjny.edu.

Communication. Email is a formal channel — please sign with your full name.

A note on reaching me. I read and answer email, and I want to be responsive to you — but expecting a response instantly is not reasonable. Please allow at least 24 hours on weekdays for a reply before following up; and know that an email sent Friday evening may not get an answer until Monday. Also…I go offline at 9:00 PM each evening (because I get up at 5:45 AM!), so anything sent after that I will not see until the next day. If you write me at 10 PM the night before something is due, my answer will arrive too late to help you. This is not me ignoring you — it is how I stay rested enough to teach you well. Ask early and you will always hear back.

Class Schedule — Fall 2026

Meetings are Tuesdays and Thursdays, 1:40–3:05 PM, Room MCE 402. Exam dates are fixed; topics may shift. Any change is announced in class and on Canvas, and the posted schedule at CoolPsychology.com/psy315 is always current.

Date	Day	Topic — and what happens that day
Sep 10	Thursday	Unit 1 — Welcome, variables & measurement + math refresher
Sep 15	Tuesday	Unit 2 — Frequency distributions & graphs
Sep 17	Thursday	Unit 3 — Central tendency
Sep 22	Tuesday	Unit 4 — Variability (SD, variance)
Sep 24	Thursday	Unit 5 — z-scores & the normal curve
Sep 29	Tuesday	Review 1
Oct 1	**Thursday**	**EXAM 1 (Units 1–5)**
Oct 6	Tuesday	Unit 6 — Correlation & scatterplots (+ Exam 1 results)
Oct 8	Thursday	Unit 7 — Regression & prediction
Oct 13	Tuesday	Review 2
Oct 15	**Thursday**	**EXAM 2 (Units 6–7 + descriptives)**
Oct 20	*Tuesday*	*No class — University Meeting Day*
Oct 22	Thursday	Unit 8 — Probability, sampling & the CLT (+ Exam 2 results)
Oct 27	Tuesday	Unit 9 — Logic of hypothesis testing (z-test) + power
Oct 29	Thursday	Unit 10 — One-sample t-test
Nov 3	Tuesday	Unit 11 — Independent-samples t-test
Nov 5	Thursday	Unit 12 — Paired / dependent t-test
Nov 10	Tuesday	Review 3
Nov 12	**Thursday**	**EXAM 3 (Units 8–12)**
Nov 17	Tuesday	Unit 13 — One-way ANOVA (+ Exam 3 results)
Nov 19	Thursday	Unit 14 — Two-way ANOVA: main effects & interactions
Nov 24	Tuesday	TBA / flex — Thanksgiving week
Nov 26	*Thursday*	*No class — Thanksgiving*
Dec 1	Tuesday	Two-way ANOVA: reading interaction graphs
Dec 3	Thursday	Flex / Catch-up (insurance buffer)
Dec 8	Tuesday	Review 4
Dec 10	**Thursday**	**EXAM 4 (Units 13–14)**
Dec 15	Tuesday	Course wrap + game rules & teams (+ Exam 4 results)
Dec 16–22		Statistics Game (team extra credit) — your assigned finals slot

Semester dates to know: Sep 9–15 — late registration and program changes · Sep 30 — last day to opt for Pass/No Credit · Oct 29 — last day to withdraw with a WD (semester midpoint) · Dec 15 — last day of classes · Dec 16–22 — finals. **The live schedule, always current, is at CoolPsychology.com/psy315/schedule.html.**

Block	Topics	Exam
1 — Describing data	Frequency distributions · central tendency · variability · z-scores & the normal curve	Exam 1 — Oct 1
2 — Relationships	Correlation · regression	Exam 2 — Oct 15
3 — Hypothesis testing & t-tests	Probability & the CLT · hypothesis-testing logic (+power) · one-sample, independent, & paired t-tests	Exam 3 — Nov 12
4 — ANOVA	One-way ANOVA · two-way ANOVA (main effects & interactions)	Exam 4 — Dec 10

Block	Topics	Exam
Finals week	Team statistics game (extra credit)	no final exam