



PSYC 2510 G-Statistical Princip for Psy section name section credit hours
Credits
Syllabus

Course Information

Meeting times and location: section meeting_times section location

Catalog description: This course covers introductory-level topics in statistics that are applicable to psychological research. Both descriptive and inferential statistics are covered. Topics include applying statistical formulas to psychological data and interpreting the results of statistical analyses.

Prerequisites: MATH-096 and PSYC-1110

Terms offered: Fall Only

Section-specific Course Description:

Course Level Objectives

Upon successful completion of this course, you will be able to:

- 1. Demonstrate an understanding of the differences between descriptive and inferential statistics.**
 - Define descriptive and inferential statistics
 - Distinguish between descriptive and inferential statistics and give examples
- 2. Demonstrate an understanding of the differences between parametric and nonparametric statistics.**
 - Define and distinguish between a population and a sample
 - Define statistics and parameters
 - Distinguish between a parameter and a statistic and give examples
 - Classify data with respect to the four levels of measurement: nominal, ordinal, interval and ratio
- 3. Develop the ability to gather information from multiple sources and synthesize this information.**

4. **Develop skills to critically evaluate studies which incorporate statistics**
5. **Compute the different statistical tests manually and with a calculator and explain results.**
 - compute and interpret measures of central tendency, measures of variability, percentiles
 - perform, determine significance of, and explain standard scores (z-scores and t-scores)
 - state null and alternative hypotheses
 - determine and interpret significance of hypothesis tests (p -values)
 - calculate and interpret effect size
 - identify type I and type II errors
 - perform, determine significance of, and explain one- and two-sample t-tests
 - perform, determine significance of, and explain a one-way ANOVA (and post-hoc tests as appropriate)
 - perform, determine significance of, and explain correlation coefficients
 - perform, determine significance of, and explain simple linear regression
 - perform, determine significance of, and explain non-parametric tests such as Spearman rank-order correlation and Chi-square test
6. **Graph different types of data manually.**
 - Construct a frequency distribution including midpoints, relative frequencies and cumulative frequencies
 - Construct frequency histograms and polygons
 - Graph and interpret data sets
7. **Graph data and compute descriptive statistics, t-tests and ANOVA using SPSS or other appropriate statistical software**

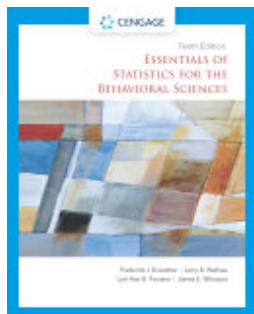
General Education Student Learning Outcomes

This course meets the requirements set forth by the state of New Mexico for a general education course that is transferable to any public institution of higher education in New Mexico. Each general education course addresses three essential skills as outlined in the table below.

General Education Content Area	Essential Skills Associated with the Content Area
Communication	Communication, Critical Thinking, Information & Digital Literacy
Creative and Fine Arts	Communication, Critical Thinking, Personal & Social Responsibility
Humanities	Critical Thinking, Information & Digital Literacy, Personal & Social Responsibility
Mathematics	Communication, Critical Thinking, Quantitative Reasoning
Science	Critical Thinking, Personal & Social Responsibility, Quantitative Reasoning
Social & Behavioral Sciences	Communication, Critical Thinking, Personal & Social Responsibility

For further information on the Essential Skills, visit the [General Education Essential Skills](#) page.

Required Texts and/or Materials



Essentials of Statistics for the Behavioral Sciences

MindTap Digital Platform

multiple format options

Frederick J Gravetter, Larry B. Wallnau, Lori-Ann B. Forzano, James E. Witnauer

Cengage Learning

2020-01-23

10th

Multiple format options available. Please visit the SJC bookstore (<https://bookstore.sanjuacollege.edu/>) for options and individual instructor preferences.

Required Technology and Software

- Canvas
- Chrome, Safari, or Firefox

Technical Support

Technical support is available through the San Juan College Help Desk 24/7/365. The help desk can be reached at 505-566-3266 or by creating a ticket at [San Juan College Help Desk](#).

For tickets and password reset: [San Juan College Help Desk](#)

For Canvas support information: [Canvas Support](#)

Accessibility/Privacy Policies for all Technology Tools Used

[Accessibility/Privacy Policies for all Technology Tools Used](#)

Course Requirements

Please note: Specific learning activities and expectations vary by instructor and course format. Please consult with your individual instructor for further details.

In this class, you will:

1. Engage with and apply course material through regular reading, writing, practice problems, and lab activities
2. Participate in peer-to-peer interactions (e.g., discussions), allowing you to exercise critical reasoning, reflection, and communication skills while engaging with multiple perspectives
3. Learn and practice using statistical software to analyze and report data
4. Check understanding through formal assessments (chapter quizzes or exams)
5. Apply course concepts to "real world" contexts through research activities

Unless otherwise noted, any electronic documents submitted must be compatible with PC operating systems (e.g., .doc, .docx, .pdf, etc.). Please do NOT submit .pages or .key files. Check with individual instructors regarding Google Drive files (e.g., Google sheets, docs, or slides).

Please refer to individual course syllabi for further details regarding course activities, requirements, and expectations.

COVID Safe Practices for Being on Campus

Masks / cloth face coverings must be worn while on campus in accordance with the New Mexico public health order. If you feel that you cannot wear a mask due to health complications, please contact Disabilities Services:

disabilityservices@sanjuancollege.edu or call (505) 566-3271. Hand sanitizer stations are at all building entrances, please “wash in, wash out”--clean your hands when you enter and before you leave. Classrooms and labs have been arranged to allow for social distancing; please respect your classmates and instructors by staying 6 feet away from everyone. You will be expected to disinfect your table or area prior to class and after class, cleaning products will be provided for this purpose. Check with your instructor for specific policies for their course. Please do not congregate in hallways or common areas, instead utilize our beautiful outside spaces and weather to visit with your friends and colleagues from a safe distance.

If you have been in contact with anyone who has tested positive for COVID-19, has symptoms, or is waiting on test results, contact your instructor and DO NOT come to class. If you have tested positive, have symptoms or are waiting on test results, contact your instructor and DO NOT come to class. Your health care provider or the assigned contact tracer will let you know when it is safe for you to be around others.

Student Support

Student Services and Support

The Student Support webpage provides information on counseling, tutoring, technical support, and many other support services available to San Juan College students.

[Student Support](#)

Academic Support

Academic Support webpage provides information on academic advising, the library, Testing Center, and the honors program.

[Academic Support](#)

Participation and Attendance Policy

Consistent participation is linked to academic success; therefore, it is in your best interest to participate regularly throughout the semester and stay in communication with your instructor.

Specific participation and attendance policies vary by instructor and course format. Please consult individual course syllabi for further details.

Other Classroom Policies and Expectations

You are rising professionals with valuable contributions to share with this class. This is a space to explore, grown, and challenge ideas and understandings. To facilitate this, please: "show up" and be prepared; evaluate ideas and multiple perspectives (including your own) critically; be respectful toward and considerate of each other (even in moments of disagreement); be responsible scholars (please review and abide by the college academic honesty policy); and actively participate in the learning process.

Specific policies regarding classroom/online participation, late work, extra credit, etc. vary by instructor and course format. Please consult individual course syllabi for further details.

Canvas Participation and Expectations

As noted, your consistent participation is critical for your success. Plan to log in to Canvas regularly.

Specific Canvas policies and expectations vary by instructor and course format. Please consult individual course syllabi for further details.

Instructor Response Time

Specific communication preferences and policies vary by instructor. Please consult individual course syllabi for further details.

Course Time Commitment

Specific weekly course time commitments vary by course duration (e.g., a 6-week, 8-week, or 16-week format). Please consult individual course syllabi for specific expectations.

However, as a 4-credit course, in general you should plan:

- *6-week course: ~30 hrs week*
- *8-week course: ~22-24 hrs week*
- *16-week course: ~12 hrs week*

Grading

Final grades are calculated based on course activities and assessments and vary by instructor. Please consult individual course syllabi for details.

Letter grades are based on the following percentages:

- 90-100% = A
- 80-89.99% = B
- 70-79.99% = C
- 60-69.99% = D
- < 60% = F

Key Dates to Remember

[Full Academic Calendar](#)

Course Schedule

Course schedules vary by instructor and course duration, and are subject to change at instructor discretion. Please consult individual course syllabi for details.

However, you can expect to cover the following topics through your course:

1. Introduction to and overview of statistics
 - Defining "statistics"
 - Parameters vs Statistics
 - Populations vs Samples
 - Descriptive and Inferential Statistics
 - Measurement Scales
2. Frequency distributions
3. Measures of central tendency (mean, median, mode)
4. Measures Variability (range, variance, standard deviation)
5. z-Scores and Standardized Distributions
6. Probability and Samples
7. Hypothesis Testing
8. The t -statistic (one-sample, two independent samples, two related samples)

9. Analysis of Variance (ANOVA)
10. Correlation
11. Regression
12. The Chi-square statistic (goodness of fit and test of independence) & other nonparametric tests

College Policies

The following information also applies to your work in this class. If you have special needs for campus emergency situations, please inform me immediately.

1. **Academic Accommodations - American with Disabilities Act (ADA)**

If you believe you need academic accommodations due to physical or learning disabilities, you are encouraged to inform them as soon as possible. The coordinator can work with you in verifying your disabilities and developing accommodation strategies. Please go to [Disability Services Office](#), click the button for "Request for Services" and complete all the steps.

You can also contact the college's disability coordinator in the Advising/Counseling Center at 566-3271 or disabilityservices@sanjuancollege.edu. More information is available on the website listed above.

2. **The Family Educational Rights and Privacy Act (FERPA)**

Your personal information and grade are confidential. Aside from routine reporting to the college required for this course, I will not share such information with anyone unless I have your permission.

3. **Academic Honesty Rules**

San Juan College expects all students to adhere to the [Academic Honesty Rules](#) as posted online. These are the official guidelines for all classes at San Juan College (July 2006).

4. **Student Conduct Statement**

College is preparation for professional opportunities, and professional conduct is expected in courses, including online classes, as well as any written communications, and interactions with members of the college community. As part of our learning community, students are expected to interact and communicate in a mature, respectful, thoughtful, and supportive manner. Students who demonstrate disrespectful, hostile, belittling, bullying or other disruptive behavior will be subject to potential consequences and possible dismissal from the college. The college will take appropriate action when students demonstrate threatening behavior (to others or self). Students should refer to the Code of Conduct in the

Student Handbook for additional information.

5. **Student Safety**

Keeping students safe is a priority, and part of that is ensuring that we have the ability to communicate emergency messages – whether for school closures due to weather or for more or urgent situations. Rave is San Juan College’s emergency messaging system. Through your SJC student email, you will automatically receive email messages, however, it is also vital that you receive text messages. In order to receive the messages, you must register in a simple process with [Rave](#). When registering, please make sure that your mobile status is “confirmed.”

The Department of Public Safety is available 24 hours per day. In an emergency, they can be accessed by calling 215-3091 or 566-3333.

In the event of an emergency, a Rave message will be sent, and depending on the situation, you will be instructed to do one of the following:

- Evacuate the building
- Shelter in place (Campus doors are locked, and operations continue as normal. During this situation, no one other than law enforcement is allowed in or out of the campus.)
- Lockdown (Campus doors are locked. All operations cease, and you should take cover in your immediate area. No one other than law enforcement is allowed in or out of the campus.

6. **Non-Discrimination, Sexual Harassment, and Retaliation.**

San Juan College does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, genetic, veteran’s status, or on the basis of any other category protected under federal, state and local laws. If you have experienced sexual harassment, sexual assault, or any other form of protected class discrimination, we encourage you to make a report. If you report to a faculty member, she/he/they are obligated by policy to share knowledge, notice, and/or reports of harassment, discrimination, and/or retaliation with the Title IX Coordinator. These disclosures include but are not limited to reports of sexual assault, dating/domestic violence, and stalking. You may also make a confidential report to a SJC Counselor. Please refer to San Juan College’s [Title IX](#) site for further details.

San Juan College's Title IX Coordinator is Stacey Allen, Assistant Director of Human Resources/Equity, Diversity, and Inclusion Officer. The office is located at the Educational Services Center Building, 2nd Floor, Human Resources, Room 4243 at (505) 566-3515 or allens@sanjuancollege.edu.

7. **Drop for Non-Attendance and/or Non-Participation**

Class Attendance and Participation Expectation:

Face-to-Face -- Students are expected to attend and participate in class regularly. Any student missing more than 10% of consecutive class time, (For example, in a regular 15-week class that meets twice a week, this equates to the student missing 3 consecutive classes) without consultation with the instructor may be considered as having abandoned the course.

On-line -- Students are expected to participate regularly and submit all course assignments, based on the course guide definition. A student who does not submit any assignments during a consecutive 10% of the course (1.5 weeks of a 15-week semester) without consulting the instructor, may be considered as having abandoned the course. Logging in does not meet the attendance standard.

Competency-Based Education Classes -- Students are expected to have regular and substantive interactions with their instructor and to actively work on course content. A student who has not submitted coursework, nor had substantive interactions with the instructor over a consecutive 10% of the term, without the instructor's prior approval, will be considered to have abandoned the competency progression. Last date of attendance will be recorded as the last date that coursework was submitted or that the student met with the instructor. For on-line learners, logging in does not meet the attendance standard.

8. Failure to Meet Class Participation Expectation:

Students who fail to meet participation expectations will have their last date of attendance recorded. This date will be used to recalculate any financial aid received/veteran's benefits received, and the student may be required to repay the institution/government. If the student does not drop the course, an 'X' grade will be recorded. An 'X' grade impacts the grade point average the same as an 'F'.

9. Grading Policies

Incomplete: Incomplete Grade Assignment ([Incomplete Grades Information](#))

The grade of I (Incomplete) is given for passing work that could not be completed during the semester because of circumstances beyond the student's control. Ordinarily, the assignment of an I is given by the course instructor at the time final grades are due

In no case is an I grade to be used to avoid assignment of D or F grades for

marginal or failing work or to require a student to enroll in the class the next semester because work was not completed on time. Circumstances warranting the issuance of an I grade must be beyond the student's control and must be documented on the appropriate form prior to approval.

I grades can be removed only during the subsequent 16 weeks from the end of term, or within the time limit set by the instructor. Removal of an I is accomplished by completing the work in a manner acceptable to the instructor. Re-enrollment in the course under the repeat option does not remove the prior grade of I. Students should not re-enroll for the course. An I not made up within 16 weeks or within the time limit set by the instructor will change to an F grade thereafter and cannot be changed by work completion.

10. **Grade Appeals**

The policy for grade appeals is in the Academic Catalog. ([Grade Appeal Policy](#))

Student Handbook

The Student Handbook provides information on Student support, student organizations, and San Juan College policies.

[Student Handbook](#)