



College of Education and Human Development
School of Applied Psychology

PSY 616

Statistics, Research, and Evaluation

Credits: 3 Term: Summer 2026

Instructor Information



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Office Location: Henry 123C

Office Hours: By appointment

Communication

With me

Canvas Inbox will be the primary platform for communication with me and I will respond to your messages within 24 hrs M-F (with the exceptions of University holidays). I will also post announcements in the Canvas course. My expectation is that you will read all announcements and messages from me within 24 hrs M-F and contact me promptly if you have any questions or concerns. You are also welcome to email me at jerelyn.watanabe@chaminade.edu. Please do not send an email to the student email for me (it will pop up first) because I'm not able to access this account directly.

If you will be late or will miss class, please send me a message through Inbox or email as soon as possible. Your presence is important to the class dynamic and we will all miss out when you are not there.

With other students

Canvas Inbox will be the primary way for you to communicate with other students in this class. Please respond to messages from other students within 24 hours if at all possible.

Netiquette

When interacting with others in Canvas, remember that we are all humans deserving of respect and consideration. This description of excellent Netiquette comes from the University of

Connecticut's Rules of Netiquette in Online & Distance Learning Courses:

<https://onlinestudent.uconn.edu/netiquette/>

University of Connecticut. (2025, March 26). Communication Guidelines | Online Students.

<https://onlinestudent.uconn.edu/communication-guidelines/>

College & School Information

College of Education and Human Development

School of Applied Psychology

Office Location: Brogan Hall, 110

Phone: (808) 739-4652

If you have questions regarding your program, reach out to the MSCP Program Director or the School of Applied Psychology.

Course Description & Materials

Catalog Course Description

PSY 616

This course covers the fundamentals of research design, statistical analysis, and evaluation of research results within the counseling context. Computer applications for statistical analysis are utilized.

Time Allocation

PSY 616 is a three-credit hour course requiring 135 clock hours of student engagement, per the official CUH Credit Hour Policy. Over the 10 weeks of this course, students will spend 40 hours in class participating in discussions and applications of content, 35 hours on required reading and course assignments, 10 hours of journaling outside of class, and 35 hours on a self-directed research proposal,.

Required Materials

- 1) Cozby, P. C. & Bates, S.C. (2024). *Methods in behavioral research* (15th ed.). New York: McGraw Hill.
- 2) Strunk, K.K., & Mwavita, M. (2021). *Design and Analysis in Educational Research Using jamovi: ANOVA Designs* (1st ed.). Routledge. <https://doi.org/10.4324/9781003154297>
- 3) Jamovi open statistical software <https://www.jamovi.org/>

Technology Information

You will need a laptop to use Jamovi open statistical software and to submit assignments in Canvas.

Canvas (<https://chaminade.instructure.com>)

Canvas will be used for your primary access to course materials, class activities, including online submission of assignments, grading rubrics, grades and feedback. The Inbox will be the primary platform for communication with your instructor and peers.

Jamovi open statistical software <https://www.jamovi.org/>

“The jamovi project was founded to develop a free and open statistical platform which is intuitive to use, and can provide the latest developments in statistical methodology. At the core of the jamovi philosophy, is that scientific software should be “community driven”, where anyone can develop and publish analyses, and make them available to a wide audience. jamovi aims to be a neutral platform, and takes no position with respect to competing statistical philosophies. The project was not founded to promote a particular statistical ideology, instead wanting to serve as a safe space where different statistical approaches might be published side-by-side, and consider themselves first-rate members of the jamovi community” (The jamovi project, 2025).

Note: [PRIVACY AND JAMOVI DESKTOP](#)

“The desktop version of jamovi is entirely self-contained, and user’s data does not leave the device. While operating, the desktop version performs minimal connections to the internet, only doing so for the following reasons. 1. displaying the welcome screen 2. checking for available software updates 3. the user is browsing the jamovi library and installing modules. In all cases we do not store identifying information, and the final digits of IP addresses are not stored. The data is only used internally by the jamovi project to understand general trends and patterns in the use of jamovi.” (The jamovi project, 2025)

The jamovi project (2025). *jamovi* (Version 2.6) [Computer Software]. Retrieved from <https://www.jamovi.org>

Learning Outcomes

Master of Science in Counseling Psychology (MSCP) Program Learning Outcomes (PLOs)

PLO 1: Graduates will apply ethical standards, engage in advocacy, and practice within the legal and professional frameworks of the counseling profession across service delivery modalities.

PLO 2: Graduates will integrate foundational counseling knowledge with evidence-based clinical skills to conceptualize client concerns, develop treatment or intervention plans, and facilitate therapeutic change with diverse populations.

PLO 3: Graduates will apply culturally-sustaining counseling practices that address systemic barriers, honor diverse identities, and advance justice and peace within the communities they serve.

PLO 4: Graduates will apply the specialized knowledge, skills, and professional dispositions required for their concentration, including preparation for their respective credentialing.

Course Learning Outcomes (CLOs)

Upon completion of PSY 616, students will:

CLO 1: Differentiate between populations and samples and evaluate how each informs research design decisions, statistical inference, and the interpretation of research findings within counseling and applied psychological contexts. (PLO 2)

CLO 2: Utilize computer-based statistical tools to organize, code, and analyze research data, and to generate and interpret statistical output for research evaluation purposes. (PLO 2)

CLO 3: Apply the scientific method to examine relationships among variables, conduct hypothesis testing, and interpret results to inform evidence-based counseling practice. (PLO 2)

CLO 4: Identify and critically evaluate ethical considerations in psychological research, including potential sources of ethical violations related to research design, data collection, analysis, and dissemination of findings. (PLO 1)

CLO 5: Develop testable research hypotheses and design an appropriate research methodology, culminating in a research proposal that demonstrates alignment among research questions, design, and analytic strategies. (PLO 2)

Marianist Values

This class represents one component of your education at Chaminade University of Honolulu. An education in the Marianist Tradition is marked by five principles and you should take every

opportunity possible to reflect upon the role of these characteristics in your education and development:

1. Education for formation in faith.
2. Provide an integral, quality education.
3. Educate in family spirit.
4. Educate for service, justice and peace, and integrity of creation.
5. Educate for adaptation and change.

Native Hawaiian Values

Education is an integral value in both Marianist and Native Hawaiian culture. Both recognize the transformative effect of a well-rounded, value-centered education on society, particularly in seeking justice for the marginalized, the forgotten, and the oppressed, always with an eye toward God (Ke Akua). This is reflected in the 'Olelo No'eau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Olelo No'eau 364) May I live by God.
2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kū'ono'ono ('Olelo No'eau 1957) Acquire skill and make it deep.
3. Educate in Family Spirit ('Ohana) 'Ike aku, 'ike mai, kōkua aku kōkua mai; pela iho la ka nohana 'ohana ('Olelo No'eau 1200) Recognize others, be recognized, help others, be helped; such is a family relationship.
4. Educate for Service, Justice and Peace (Aloha) Ka lama kū o ka no'eau ('Olelo No'eau 1430) Education is the standing torch of wisdom.
5. Educate for Adaptation and Change (Aina) 'A'ohe pau ka 'ike i ka hālau ho'okahi ('Olelo No'eau 203) All knowledge is not taught in the same school

'Ike aku, 'ike mai, kōkua aku kōkua mai; pela iho la ka nohana 'ohana

('Olelo No'eau 1200)

Recognize others, be recognized, help others, be helped; such is a family relationship

This may be the first time you have encountered research design, statistical analysis, and evaluation of research results or you may have encountered one or more in past studies or through your work. Given this diverse starting point, I consider the Marianist value, "Educate in family spirit," to be crucial to my teaching and your learning. I believe that an effective way to learn is through 'hands on' application of concepts so we will do much of the statistical analysis together in class. Students who have more experience with these topics will be asked to support their peers. Those of you who are just starting out with these topics - please understand that your peers were all once in the same situation and remember what it was like. My experience at

Chaminade has been that students, staff, and other professors engage with each other with kindness and consideration. This is one of the manifestations of this Marianist value in the Chaminade community.

Course Assessments

Course assessments support the process of internalizing new ideas into your existing understanding with a focus on communicating these connections through discussion, presentation, and written text. All writing for this course must meet the standards of academic writing and include in-text citations and references in APA 7th edition format.

Communication Regarding Assessments

I will grade assignments within one week of the due date and all grades will be entered in Canvas. My comments and notation on your submitted work are intended to provide you with feedback since you may revise and resubmit any assignment. My expectation is that you read these comments whether or not you choose to revise your assignment.

Content Assessments - 50%

In-Class Discussions - CLO 1, 4, 5

Discussions will be held during each class to deepen your understanding of topics from the textbooks, peer-reviewed articles

Statistical Analysis Software (jamovi) Application Assignments - CLO 2, 3, 5

Statistical analysis software (jamovi) application assignments will develop your skills in quantitative analysis. The process includes guided practice before analyzing data sets and composing narrative that demonstrates your understanding of the data set, the statistical test, test assumptions, determination of statistically significant results, and, if applicable, interpreting results and effect size.

Content Quizzes - CLO 1, 3, 4, 5

Content quizzes will assess your comprehension of key concepts, theories, and applications from each assigned textbook reading. Successful completion of these quizzes will solidify your understanding of the research process and essential skills. (And prepare you for the program comprehensive examination.) You will also complete a plagiarism training and certification.

Research Process Assessments - 50%

Researcher Journal & Journal Paper - CLO 4, 5

You will keep a research journal during the course to record your reflections on our classes, the readings, discussions, assignments, and most importantly, your insights as you develop research

skills and practices. Your Journal Paper is a final summary of your experience keeping a research journal during the course. Submit 1) your journal's table of contents, 2) three journal entries that best represent your learning over the term, and 3) two pages (double spaced) explaining why you chose the entries and summarizing the experience.

Note: Please use a hardbound journal that is dedicated to this practice for the 10 weeks of the term.

Note: While your journal is private, keep in mind that you will need to submit three entries with your Journal Paper.

Research Process - CLO 1, 4, 5

Research process assignments will document the development of your research proposal throughout the term. These include peer-reviewed research article reviews, writing draft sections of the proposal and creating draft slides for your presentation of your proposal. Generally these assignments are graded Complete/Incomplete.

Research Proposal - CLO 1, 2, 3, 4, 5

You will prepare a quantitative research proposal addressing a specific problem of interest within the counseling psychology field. This proposal (minimum 10 pages double spaced text in addition to a title page and references) will follow APA 7th Edition formatting guidelines and will include a literature review and a detailed plan for analysis of your research using descriptive statistics and statistical tests. In addition to a written proposal, you will create a presentation that is between 7 and 9 minutes in length.

Course Policies

MSCP Attendance and Tardiness Policy

Students are expected to attend classes regularly and to be on time for class. Since the course is offered during an accelerated term, a student who misses more than one (1) class has missed a substantial portion of the material presented. In this case, the student will automatically receive a "C" for the course, requiring the student to retake the course in its entirety.

The policy on tardiness is left to the discretion of the instructor but be advised that extreme tardiness may be viewed as an absence by many instructors. Missing one class may, at the discretion of the instructor, result in the student's grade being lowered one letter grade.

Due Dates

Assignments need to be submitted in Canvas by 11:59 on the specified due date.

Late Work

Each assignment is essential to the course learning outcomes and it is expected that every assignment is completed to the best of your ability. Therefore, late work will be accepted until the last Friday of the term. The instructor reserves the right to assess a late assignment with a 50% point deduction irrespective of the reason for the late submission or how late it is submitted. Generally, late assignments submitted during Weeks 9 & 10 of the term will be assessed the 50% point deduction unless other arrangements are made ahead of time.

MSCP AI Use Policy

Chaminade University recognizes the increasing role of artificial intelligence (AI) technologies in academic and professional environments. AI encompasses, but is not limited to, generative AI platforms, automated writing or content generation software, coding assistants, and similar tools. Students must ensure all submitted work genuinely reflects their knowledge and effort. Using AI to produce or significantly complete graded assignments, exams or other academic tasks, defined as use that substitutes for or substantially replaces a student's own analysis, reasoning or written expression, without explicit instructor approval is considered academic misconduct and will be dealt with according to the University's Academic Honesty Policy.

If an instructor has reasonable grounds to question whether submitted work genuinely reflects a student's own knowledge, authorship, or mastery of course material, or whether it meets the course's expectations for AI use, the instructor may require the student to provide additional or alternative evidence of authorship and content mastery. Such evidence may include drafts, notes, revision history, source materials, process explanations, oral discussion, in class work, or completion of an alternative assessment. A student's refusal or inability to provide such evidence may be considered, along with other available information, in evaluating whether the work meets course requirements and stated learning outcomes. Instructors will not rely solely on AI detection software or other automated tools in making grading or academic integrity determinations. Such determinations will be based on the totality of the available information and handled in accordance with applicable University policies and procedures. See the catalog section Student Use of Artificial Intelligence in Academic Work for further information.

AI Use Perspective

AI such as ChatGPT may not be used to compose text for any assignments submitted for assessment in this course – including, but not limited to – journaling, jamovi assignments, research article reviews, discussion posts, and academic writing such as the research proposal.

My preference is that no AI is used to assist your writing, however, I understand that it is helpful for tasks such as checking formatting, spelling, and grammar.

My concern about the use of AI to “improve” or otherwise change your text is because I believe that it takes away your unique voice and perspective. You’ve dedicated time and energy to understand and learn how to effectively communicate in your professional context and with your community. Keeping control over your voice and narrative is essential.

Another concern is that when you submit your text to AI, your thoughts and narrative become part of the model and will be used by AI without attribution.

If you do use AI to assist your writing, here is the link to cite ChatGPT in APA format: <https://apastyle.apa.org/blog/how-to-cite-chatgpt>. Please use this as a referenc to cite other AI.

Changes to the Syllabus

While the provisions of this syllabus are as accurate and complete as possible, your instructor reserves the right to change any provision herein at any time. Every effort will be made to keep you advised of such changes, and information about such changes will be available from your instructor.

Final Grades

Final grades are submitted to Self-Service. Passing grades are:

A = 90% and above

B = 80-89%

Grades of Incomplete

It is expected that you will complete the course activities in a timely manner during the semester. However, a student in good standing in a course may petition the instructor for an I-grade. This grade is appropriate only if extraordinary conditions beyond the control of the student have led to an inability to complete the course requirements. When submitting a grade, the “I” must be accompanied by the alternative grade that will be automatically assigned after 30 days. These include IB, IC, ID, and IF. If only an “I” grade is submitted, the default grade is F. The completion of the work, evaluation, and reporting of the final grade is due within 30 days after the end of the term. The time limit may extend under exceptional circumstances with approval.

Important Information

Academic Honesty

Academic honesty is an essential aspect of all learning, scholarship, and research. It is one of the values regarded most highly by academic communities throughout the world. Violations of the principle of academic honesty are extremely serious and will not be tolerated.

Students are responsible for promoting academic honesty at Chaminade by not participating in any act of dishonesty and by reporting any incidence of academic dishonesty to an instructor or to a University official. Academic dishonesty may include theft of records or examinations, alteration of grades, and plagiarism, in addition to more obvious dishonesty.

Questions of academic dishonesty in a particular class are first reviewed by the instructor, who must make a report with recommendations to the Dean of the Academic Division. Punishment for academic dishonesty will be determined by the instructor and the Dean of Academic Division and may include an “F” grade for the work in question, an “F” grade for the course, suspension, or dismissal from the University.

For the most up to date information, please refer to the [Academic Honesty Policy](#) on the Chaminade University Catalog website.

Title IX and Nondiscrimination Statement

Chaminade University of Honolulu is committed to providing a learning, working and living environment that promotes the dignity of all people, inclusivity and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking. As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. Contact information may be found at the [Chaminade University Office of Title IX website](#): <https://chaminade.edu/titleix/>.

Nondiscrimination Policy & Notice of Nondiscrimination

Chaminade University of Honolulu does not discriminate on the basis of sex and prohibits sex discrimination in any education program or activity that it operates, as required by Title IX and its regulations, including in admission and employment. Inquiries about Title IX may be referred to the University’s Title IX Coordinator, the U.S. Department of Education’s Office for Civil Rights,

or both and contact information may be found at the [Chaminade University Office of Title IX website](https://chaminade.edu/titleix/): <https://chaminade.edu/titleix/>.

The University's Nondiscrimination Policy and Grievance Procedures can be located on the University webpage at:

<https://chaminade.edu/compliance/title-ix-nondiscrimination-policies-procedures/>.

To report information about conduct that may constitute sex discrimination or make a complaint of sex discrimination under Title IX, please refer to the [Campus Incident Report form](#). Chaminade University of Honolulu prohibits sex discrimination in any education program or activity that it operates. The NOTICE of NONDISCRIMINATION can be found here: [Notice of Nondiscrimination](#).

CUH Alert Emergency Notification

To get the latest emergency communication from Chaminade University, students' cell numbers will be connected to Chaminade's emergency notification text system. When you log in to the Chaminade portal, you will be asked to provide some emergency contact information. If you provide a cellphone number, you will receive a text from our emergency notification system asking you to confirm your number. You must respond to that message to complete your registration and get emergency notifications on your phone.

Student Work for Assessment

With the goal of continuing to improve the quality of educational services offered to students, Chaminade University conducts assessments of student achievement of course, program, and institutional learning outcomes. Student work is used anonymously as the basis of these assessments, and the work you do in this course may be used in these assessment efforts.

Student with Disabilities Statement

Chaminade University of Honolulu offers accommodations for all actively enrolled students with disabilities in compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act (2008).

Students are responsible for contacting Kokua Ike: Center for Student Learning to schedule an appointment. Verification of their disability will be requested through appropriate documentation and once received it will take up to approximately 2–3 weeks to review them. Appropriate paperwork will be completed by the student before notification will be sent out to their instructors. Accommodation paperwork will not be automatically sent out to instructors

each semester, as the student is responsible to notify Kokua Ike via email at ada@chaminade.edu each semester if changes or notifications are needed.

Kōkua ‘Ike: Tutoring & Learning Services

Chaminade is proud to offer free, one-on-one tutoring and writing assistance to all students. Tutoring and writing help is available on campus at Kōkua ‘Ike: Center for Student Learning in a variety of subjects (including, but are not limited to biology, chemistry, math, nursing, English, etc.) from trained Peer and Professional Tutors. Please check [Kōkua ‘Ike’s](#) website for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via TutorMe. Tutor Me can be accessed 24/7 from your Canvas account. Simply click on Account > TutorMe. For more information, please contact Kōkua ‘Ike at tutoring@chaminade.edu or 808-739-8305.

Course Schedule

Week	Before class	Class topics	Assessments
1	<p>Listen or watch: Shawn Wilson - Research is ceremony</p> <p>Bring a journal and your laptop to class</p> <p><i>Optional Read: Cozby & Bates Ch 1 - Scientific understanding of behavior</i></p> <p><i>Optional Read: Cozby & Bates Ch 2 - Where to start?</i></p>	<p>Expectations - Syllabus</p> <p>Relationality and reflexivity</p> <p>Behavioral research - where to start</p> <p>Install jamovi</p>	<p>C & B Ch 2 Quiz</p> <p>IU Plagiarism Certificate</p> <p>Introduction slides</p> <p>Researcher journal - (Journal paper due Week 10)</p>
2	<p>Read Strunk & Mwavita Ch 3 - Basic educational statistics</p> <p>Read Cozby & Bates Ch 4 - Fundamental research issues</p> <p>Ethics in behavioral research readings - Assigned Week 1 class</p> <p><i>Optional Read: Stevens & Cooper (2009)</i></p>	<p>Ethics in behavioral research discussion</p> <p>Basic educational statistics with jamovi</p>	<p>Cozby and Bates Ch 3 & 4 Quizzes</p> <p>jamovi Descriptive statistics assignment</p>
3	<p>Read Strunk & Mwavita Ch 1 pp. 1-13 - Basic issues in quantitative educational research</p> <p>Read Strunk & Mwavita Ch 2 pp. 26-35 - Sampling and basic issues in research</p>	<p>Basic issues in quantitative educational research</p> <p>Reviewing peer-reviewed research</p>	<p>Cozby & Bates Ch 5 Quiz</p> <p>Slides: Research interest (2), research ritual</p> <p>Research Article Review #1 & 2</p>

	design Read Cozby & Bates Ch 5 - Measurement Concepts		
4	Read Cozby & Bates Ch 12 - Correlation and Regression Exploratory research readings - Assigned Week 3 class	Correlation and regression Exploratory research discussion	Cozby & Bates Ch 12 Quiz jamovi correlation & regression assignment Research Article Review #3
5	Read Strunk & Mwavita Ch 4 - Introducing the null hypothesis significance test Read Cozby & Bates Ch 13 - Understanding research results: Statistical inferences	Null hypothesis significance testing (NHST) Assign Research Proposal	Cozby & Bates Ch 13 Quiz Research Article Review #4 & 5 Draft Introduction section and slides
6	Cozby & Bates Ch 7 - Surveys Strunk & Mwavita Ch 2 pp. 22-25 - Sampling Cozby & Bates Ch 8 - Experimental design Pacific research readings - Assigned Week 5 class	Experimental design Surveys and sampling - equitable demographic data collection Pacific research discussion	Cozby & Bates Ch 7 & 8 Quizzes jamovi survey assignment Research Article Review #6 Draft Literature review section and slides
7	Strunk & Mwavita Ch 6 - Independent samples <i>t</i> -test Strunk & Mwavita Ch 7 - Independent samples <i>t</i> -test case studies	Independent samples <i>t</i> -test	jamovi independent samples <i>t</i> -test assignment Research Article Review #7 & 8

8	<p>Strunk & Mwavita Ch 12 - Paired samples <i>t</i>-test</p> <p>Strunk & Mwavita Ch 13 - Paired samples <i>t</i>-test case studies</p> <p>Evaluation in practice readings - Assigned Week 7 class</p>	<p>Comparing two within-subjects scores using the paired samples <i>t</i>-test</p> <p>Evaluation in practice discussion</p>	<p>jamovi paired samples <i>t</i>-test assignment</p> <p>Draft Methods section and slides</p>
9	<p>Strunk & Mwavita Ch 8 - One-way ANOVA</p> <p>Strunk & Mwavita Ch 9 - One-way ANOVA case studies</p>	<p>One-way ANOVA</p> <p>Peer-review draft research proposal (APA format)</p>	<p>jamovi one-way ANOVA assignment</p>
10		<p>Proposal Presentation</p>	<p>Final Proposal due</p> <p>Journal paper due</p>