



School of Education and Behavioral Sciences
Psychology

PSY 616

Statistics, Research, and Evaluation

Clarence T.C. Ching Hall, 253

Wednesday 5:30 pm - 9:20 pm

Credits: 3 Section: 01 Term: Winter 2025

Instructor Information



Instructor: Jerelyn T. Watanabe

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Phone: 808.258.9239

Office Location: Henry 123C

Office Hours: TBD

Communication

With me

Chaminade Email will be the primary platform for communication with me and I will respond to your messages within 24 hrs M-F. My expectation is that you will read all messages from me and will come to class prepared and with all required materials.

You are also welcome to text me 24-7 (including at night and on weekends) and I will do my best to respond promptly.

If you will be late or will miss class, please send me a message through email or text 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 this course, 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/>

School & Department Information

School of Education and Behavioral Sciences

Office Location: Brogan Hall, 110

Phone: (808) 739-4652

If you have questions regarding your program, reach out to your Instructor or the School of Education and Behavioral Sciences.

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, 40 hours on required reading and course assignments, 10 hours of journaling, 35 hours on a self-directed research proposal, and 10 hours completing CITI Researcher Training.

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.

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 JAMOVİ 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)

Upon completion of the MSCP Program, the student will be able to:

1. Identify core counseling theories, principles, concepts, techniques and facts.
2. Identify counseling theories, principles, concepts, techniques and facts in (Mental Health, Marriage/Family or School) counseling. (the specific emphasis

would be stated for each of the emphasis areas)

3. Facilitate the counseling process with clients.
4. Identify the relationship between adaptation and change and the counseling process.

Course Learning Outcomes (CLOs)

Upon completion of PSY 616, the student will be able to:

1. Explain the difference between populations and samples, and what is associated with each in terms of research issues and statistical techniques (PLO1).
2. Utilize Jamovi in data entry, coding of variables, performing statistical functions, and producing output for analysis (PLO1).
3. Apply the scientific method to assess relationships between variables and hypothesis testing (PLO1).
4. Identify ethical issues in psychological research and potential sources of ethical violations when conducting research (PLO1).
5. Develop hypotheses and utilize research methodologies that can be tested through a research proposal design project (PLO 2 & 4).

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 'Ōlelo No'ēau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Ōlelo No'ēau 364) May I live by God.

2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kū'ono'ono ('Ōlelo 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 ('Ōlelo 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 ('Ōlelo 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 ('Ōlelo 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

('Ōlelo 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 written text and other formats.

Researcher Journal & Journal Paper - CLO 5

You will keep a research journal during the course to record your reflections on the classes, the readings, discussions, assignments, and most importantly, your insights as you develop research skills and practices. Please bring your journal to each class as we will set aside time to write reflections relevant to class activities. 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 of why you chose the entries and summarizing the experience.

In-Class Discussions and Jamovi Application Assignments - CLO 1-5

Discussions will be held during each class to deepen your understanding of topics from the textbook reading and peer-reviewed articles that relate to your research topics. Jamovi application activities will develop your skills in statistical analysis.

Chapter Quizzes - CLO 1-4

Chapter 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.

Dialectic Journal and Peer-Reviewed Research Reviews - CLO 5

You will select and review recent peer-reviewed articles related to your research proposal topic through entries in an online dialectic journal. Dialectic journal entries will include notetaking and note-making where you will critically analyze its relevance and implications for your own study. Research Reviews (two-pages) will further develop your understanding of the articles. Collaboration through peer review will refine your research proposal by strengthening your problem statement, methodology, and overall approach.

CITI Human Subject Research Training - CLO 4

CITI Researcher Training courses are essential certifications for ethical research practices. This online training covers crucial topics such as research misconduct, data management, responsible authorship, and human subjects research. After successful completion of all required modules with a minimum 80% passing score, you will submit your CITI completion certificates to Canvas by the specified due date.

Research Proposal - CLO 5

You will prepare a research proposal addressing a specific problem of interest within the counseling psychology field. This proposal (minimum 10 pages double spaced) will follow APA 7th Edition formatting guidelines and will include a:

- Title page
- Abstract - 120 words or less
- Introduction -
 - Review of literature
 - Statement of the problem
 - Theoretical framework
 - Research question, hypothesis and prediction statement
- Methodology -
 - Operational definitions
 - Subject description

- Procedures
- Survey instrument and data collection
- References (minimum 8 peer-reviewed journal articles cited in your proposal)
- One table and one figure created in jamovi

Communication Regarding Assessments

I will grade assignments within one week of submission and all grades will be entered in Canvas. Most assignments will be graded using a rubric embedded in Canvas and I will write additional comments in case you would like to revise and resubmit the assignment. My expectation is that you read these comments whether or not you choose to revise your assignment.

Course Policies

Attendance

Attendance at every class is required though you will be excused due to illness or extenuating circumstances. If you will miss a class send me an email or text as soon as possible so that we can set up an appointment to go over the activities that you would miss.

Due Dates

Assignments will be due in Canvas by 11:59 on the due date specified in Canvas.

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 day of class. 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.

AI

AI such as ChatGPT may not be used for any of your writing submitted for assessment in this course – including, but not limited to – journaling, assignment responses, and academic writing.

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](#):

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.

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 Title IX Office Contact Information and Confidential Resources website](#). On-campus Confidential Resources may also be found here at [CAMPUS CONFIDENTIAL RESOURCES](#).

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.

Assessment for Student Work

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.

Class Topics, Readings & Assessments

Week	Topics	Before class	Assessments (due before the next class)
1	Relationality & Reflexivity *Journaling and Journal Paper (due Week 10) *Research Questions /Hypotheses/ Predictions *Install jamovi in class	*Listen: Survival of the Kindest (Abel & Wilson, 2023) *Read: Stevens & Cooper (2009) *Read: Cozby & Bates - Ch 1-2 *Bring a journal and your laptop to class	*Cozby & Bates Quiz Ch 2
2	Ethics & Quantitative Educational Research *Descriptive statistics *Visualizing data using jamovi	*Read: Cozby & Bates - Ch 3 & 4 *Read: Strunk & Mwavita - Ch 1, 2 & 3	*Cozby & Bates Quizzes Ch 3 & 4 *IU Plagiarism Certificate *Descriptive statistics assignment (jamovi)
3	Considering Equity & Survey Questions *Assign Dialectic Journal and Research Article Review	*Read: Cozby & Bates - Ch 5, 6 & 7 *Read: Strunk & Mwavita - Ch 18	*Cozby & Bates Quiz Ch 5,6,7 *Research Article Reviews #1 & 2 *CITI Researcher Training #1
4	Experimental Design & Linear Regression *Research article review - Assign Research Proposal (Due Week 9) *Probability *Null hypothesis significance test (NHST)	*Read: Cozby & Bates Ch 8 & Ch 9 *Read: Strunk & Mwavita Ch 4	*Cozby & Bates Quiz Ch 8 & 9 *Research Article Reviews #3 & 4 *CITI Researcher Training #2

5	<p>Linear Regression</p> <ul style="list-style-type: none"> *Research article review *Least-Squares Regression *One sample tests 	<p>*Read: Cozby & Bates Ch 12</p> <p>*Read: Strunk & Mwavita Ch 5</p>	<p>*Cozby & Bates Quiz Ch 12</p> <p>*Research Article Review #5</p> <p>*Linear regression assignment (jamovi)</p> <p>*Draft Introduction</p>
6	<p>Independent samples t-test</p> <ul style="list-style-type: none"> *Research article review *Independent samples t-test case studies 	<p>*Read: Strunk & Mwavita Ch 6 & 7</p>	<p>*Research Article Review #6</p> <p>*Independent samples t-test assignment (jamovi)</p> <p>*Draft Literature Review (4 + peer reviewed articles)</p>
7	<p>One-way ANOVA</p> <ul style="list-style-type: none"> *Research article review *One-way ANOVA case studies 	<p>*Read: Strunk & Mwavita Ch 8 & 9</p>	<p>*Research Article Review #7</p> <p>*One-way ANOVA assignment (jamovi)</p> <p>*Draft Methodology</p>
8	<p>Factorial ANOVA</p> <ul style="list-style-type: none"> *Research article review *Factorial ANOVA case studies 	<p>*Read: Strunk & Mwavita Ch 10 & 11</p>	<p>*Research Article Review #8</p> <p>*Factorial ANOVA assignment (jamovi)</p> <p>*Complete Draft Research Proposal</p>
9	<p>Comparing two within-subjects scores using the paired samples t-test</p> <ul style="list-style-type: none"> *Paired samples t-test case studies *Peer review Final Research Proposal 	<p>*Read: Strunk & Mwavita Ch 12 & 13</p>	<p>Journal Paper</p> <p>*Paired samples t-test assignment (jamovi)</p> <p>*Optional Revision - Final Research Proposal</p>
10	<p>Research Proposal Presentations</p>		