



School of Education and Behavioral Sciences
EdD in Educational Psychology

EPSY 712

Program Evaluation, Statistics, and Psychometric Methods

Online Asynchronous with Optional Virtual Meetings

Credits: 3

Sections: 90-07, 91-07, 92-07, 93-07

Term: Accelerated Spring 2026

Instructor Information



Instructor: Dr. Jerelyn T. Watanabe

Email: jerelyn.watanabe@chaminade.edu

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 holidays). I will also post announcements in the Canvas course that include weekly video overviews and other important information. My expectation is that you will read all messages from me within 24 hrs M-F and contact me promptly if you have any questions or concerns.

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 (your peers and your instructor) are all humans deserving of respect and consideration. Based on the description of excellent Netiquette from the University of Connecticut's Rules of Netiquette in Online & Distance Learning Courses, here are the rules of netiquette:

1. Apply the same ethical standards as you would for in-person communication
2. Respect people's time by ensuring that your communication is relevant and concise.

3. Pay attention to the quality of your writing: proof-read before submitting.
4. Share your knowledge so that others can learn from you and expect to learn from others.
5. Do not participate in bullying or inciting arguments
6. Respect the privacy of your peers and instructor

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

EPSY 712 - Program Evaluation, Statistics, and Psychometric Methods

This course provides a foundation in program evaluation theory, methods, and psychometrics. Students design, implement, and analyze evaluation strategies to inform practice and decision-making in educational and clinical settings.

Time Allocation

EPSY 712 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 participating in discussions and other applications of the course 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) 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>
- 2) (Free) Jamovi open statistical software <https://www.jamovi.org/>

3) Additional readings in Canvas

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

EdD in Educational Psychology Program Learning Outcomes
Educational Psychology students will:

1. Develop and apply advanced clinical skills to effectively assess, diagnose, and treat a wide range of mental health concerns in individuals across diverse populations and contexts within educational settings and communities, while utilizing evidence-based practices and culturally responsive approaches.
2. Engage with an innovative, research-based, and real-world curriculum that emphasizes the development of strong clinical competencies, equipping them to meet the holistic and mental health needs of diverse client populations and deliver effective mental health services across educational, clinical, organizational, and community settings.
3. Critically evaluate and apply scientific knowledge and research to inform the selection and implementation of effective mental health interventions, prevention strategies, and wellness approaches that promote the well-being of individuals and communities in educational contexts and broader practice settings.
4. Synthesize the value of adaptation and change with applied 21st century leadership, supervision, and consultation skills, adapting to the evolving needs of diverse and complex organizational systems in the provision of comprehensive mental health services within educational settings and other professional contexts.

Alignment Description

- PLO 1 is linked to applied clinical and assessment skills.
- PLO 2 emphasizes cultural responsiveness and advocacy.
- PLO 3 reinforces research, critical evaluation, and evidence-based interventions.
- PLO 4 strengthens leadership, consultation, and adaptive organizational practice.

Course Learning Outcomes (CLOs)

Educational Psychology students will:

1. Evaluate theoretical principles and methodologies in program evaluation (PLO 3).
2. Analyze data collection and measurement strategies to support evaluation (PLO 3).
3. Examine the relationship between evaluation, ethics, communication, leadership, and organizational change (PLO 4).
4. Apply statistical analyses to summarize and interpret quantitative data (PLO 3).
5. Assess reliability, validity, and bias in evaluation measures (PLO 3).

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'eau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Ōlelo 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 ('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 program design, statistical analysis, and psychometric (quantitative psychology) methods 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 by duplicating research processes. You will share research with your peers through asynchronous discussions. 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 they 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 your understanding through written text and presentations.

Content Assessment - 30%

Canvas Discussions and Jamovi Application Assignments

Canvas discussion assignments will deepen your understanding of topics from the textbook, readings and peer-reviewed articles that relate to your research topics. Jamovi application activities will develop your skills in statistical analysis.

Research Process - 30%

Researcher Journal & Journal Paper

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. 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.

- Please use a hardbound journal that is dedicated to this practice for the 10 weeks of the term.
- Note that while your journal is private, keep in mind that you will need to submit three entries with your Journal Paper.

Dialectic Journal and Peer-Reviewed Research Reviews

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 each article's 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.

Indiana University Plagiarism Certification

To learn how to recognize plagiarism at the doctoral student level, you will complete the Indiana University Plagiarism tutorials and pass a certification test by answering 9 out of 10 questions correctly.

Research Proposal - 40%

CITI Human Subject Research Training

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.

Proposal and Presentation

You will prepare a research proposal addressing a specific problem of interest within the quantitative psychology field. In addition to a written proposal, you will create slides and record a presentation that is between 7 and 8 minutes in length.

The written proposal will follow APA 7th Edition formatting guidelines and be a minimum of 10 double-spaced pages in length excluding the Title page and References. Your proposal will include a:

- Title page
- Introduction and Literature Review
 - Identification of specific problem area (e.g., what is it, why it is important).
 - Prevalence, scope of problem.
 - An overview of what we know (literature review).
 - An overview of what we don't know (i.e., gap/gaps in the literature that you plan to address in your project).
 - Statement of the purpose of your study and research question(s).
- Methodology -
 - Design
 - Sample and Procedures
 - Measurement including a discussion of the principles for evaluating psychometric tests *
 - Ethics
 - Analysis plan (using jamovi)
 - Limitations

- References (minimum 8 peer-reviewed journal articles cited in your proposal)

Slides and Drafts

Your research proposal will build on slide presentation and draft writing assignments.

Communication Regarding Assessments

I will grade assignments within one week of the due date and all grades will be entered in Canvas. Assignments will be graded using a rubric or checklist and I may annotate your submission within Canvas and/or write comments in case you would like to revise and resubmit the assignment. My expectation is that you read these annotations/comments whether or not you choose to revise your assignment.

Course Policies

Attendance

Active participation in discussions and other class activities during the week is expected. If you are ill or are unable to participate for other reasons, please send me a message through Inbox to let me know.

Due Dates

Assignments will be due in Canvas by 11:59 pm on Monday unless otherwise specified in Canvas. All assignments must be submitted by 11:59 pm on the last Friday of the term unless other arrangements are made ahead of time.

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.

AI

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 change your text is because I believe that it detracts from your strong voice and unique perspective. You know how to effectively communicate in your professional context and community so keeping control over your narrative is important.

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

Use of AI is a judgement call that I will leave to you.

Here is the link to cite AI (ChatGPT in this resource) in APA format:

<https://apastyle.apa.org/blog/how-to-cite-chatgpt>

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.

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	Readings: Prepare for the week	Assessments: Understand & apply
1	<p>Relationality & Reflexivity</p> <p>*Journaling and Assign Journal Paper (due Week 10)</p> <p>*APA Style</p> <p>*Install jamovi</p>	<p>*Listen: Survival of the Kindest (Abel & Wilson, 2023)</p> <p>*Read: Stevens & Cooper (2009)</p> <p>*Read: Strunk & Mwavita - Ch 1 & 2</p> <p>*Acquire a hardbound journal</p>	<p>*Slides #1 - Introductions</p> <p>*IU Plagiarism Certificate</p> <p>*CITI Researcher Training #1</p>
2	<p>Ethics & Quantitative Educational Research</p> <p>*Equity and Social Justice</p> <p>*Descriptive statistics</p> <p>*Visualizing data using jamovi</p>	<p>*Read: Strunk & Mwavita - Ch 3 & 18</p> <p>*Read/Discuss #1: Equitable demographic data collection</p>	<p>*jamovi Assignment #1 - Descriptive statistics</p> <p>*Slides #2 - Research ritual and topics</p>
3	<p>Experimental Design & Null hypothesis significance test (NHST)</p> <p>*One sample tests</p> <p>*Assign Dialectic Journal and Research Article Review</p> <p>*Psychometrics (Quantitative Psychology)</p>	<p>*Read: Strunk & Mwavita Ch 4 & Ch 5</p> <p>*Read/Discuss #2: Psychometrics (Quantitative Psychology)</p>	<p>*CITI Researcher Training #2</p> <p>*Research Article Reviews #1 & 2</p>
4	<p>Correlation & Linear Regression</p> <p>*Probability</p> <p>*Correlation</p> <p>*Least-Squares Regression</p> <p>*Assign Research Proposal (Due Week 9)</p>	<p>*Read: Correlation and linear regression</p> <p>*Read/Discuss #3: Pacific Research Protocols</p>	<p>*jamovi assignment #2 - correlation and linear regression</p> <p>*Research Article Review #3 & 4</p>
5	<p>Independent samples t-test</p> <p>*Independent samples t-test case studies</p> <p>*Developmental Evaluation</p>	<p>*Read: Strunk & Mwavita Ch 6 & 7</p> <p>*Read/Discuss #4: Developmental Evaluation</p>	<p>*jamovi assignment #3 - Independent samples t-test</p> <p>*Research Article Review #5</p> <p>*Draft Introduction</p> <p>*Slides #3 - Introduction</p>

6	Comparing two within-subjects scores using the paired samples t-test *Paired samples t-test case studies	*Read: Strunk & Mwavita Ch 12 & 13	*jamovi assignment #4 - Paired samples t-test *Research Article Review #6 *Draft Literature Review (4 + peer reviewed articles) *Slides #4 - Lit Review
7	One-way ANOVA *One-way ANOVA case studies *Pacific Methodology	*Read: Strunk & Mwavita Ch 8 & 9 *Read/Discuss #5: Pacific Methodology	*jamovi assignment #5 - One-way ANOVA *Research Article Review #7 *Draft Methodology *Slides #5 - Methodology
8	Factorial ANOVA *Factorial ANOVA case studies *APA format review	*Read: Strunk & Mwavita Ch 10 & 11 *APA format review	*jamovi assignment #6 - Factorial ANOVA *Research Article Review #8
9	Within subjects ANOVA *Principles-based evaluation	*Read: Strunk & Mwavita Ch 14 & 15 *Read/Discuss #6: Principles-based evaluation	*Complete Draft Research Proposal Due
10	Research Proposal Presentations		*Journal Paper *Proposal Presentation *Optional Revision - Final Research Proposal