



Chaminade
University
OF HONOLULU

HAWAI'I SCHOOL OF PROFESSIONAL PSYCHOLOGY
AT CHAMINADE UNIVERSITY OF HONOLULU

Course Syllabus

[Chaminade University Honolulu](http://www.chaminade.edu)

3140 Wai'ala'e Avenue - Honolulu, HI 96816

www.chaminade.edu

Course Number: PP-7042

Course Title: Statistics Laboratory

Department Name: Hawai'i School of Professional Psychology

College/School/Division Name: College of Education and Behavioral Sciences

Term: Spring 2021

Course Credits: 01

Class Meeting Days: Tuesdays

Class Meeting Hours: 5:50 – 6:50

Class Location: Henry Hall 121

Instructor Name: Sean W. Scanlan, Ph.D.

Email: sean.scanlan@chaminade.edu

Phone: 808.739.4681

Office Location: Kieffer Hall 11A

Office Hours: Tuesday 1:30 – 4:00; Wednesday 10:00 – 3:00

University Course Catalog Description and Overview

Students learn statistics necessary for describing data and evaluating research instruments and complete analyses associated with the methodologies surveyed in PP7041 - Quantitative Inquiry.

Instructional Contact and Credit Hours

Students can expect 15 hours of instructional engagement for every 1 semester credit hour of a course. Instructional engagement activities include lectures, presentations, discussions, group-work, and other activities that would normally occur during class time. Instructional engagement activities may occur in a face-to-face meeting, or in the classroom.

In addition to instructional engagement, students can expect to complete 30 hours of outside work for every 1 semester credit hour of a course. Outside work includes preparing for and completing readings and assignments. Such outside work includes, but is not limited to, all research associated with completing assignments, work with others to complete a group project, participation in tutorials, labs, simulations and other electronic activities that are not a part of the instructional engagement, as well as any activities related to preparation for instructional engagement.

At least an equivalent amount of work specified in the paragraph above shall be applied for other academic activities as established by the institution, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

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:

- Education for formation in faith

- Provide an integral, quality education
- Educate in family spirit
- Educate for service, justice and peace
- 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 (Hawai'ian 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'ēau 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'ēau 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'ēau ('Ōlelo No'ēau 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'ēau 203) All knowledge is not taught in the same school

Program Learning Outcomes: HSPP Aims and Competencies

The Hawai'i School of Professional Psychology at Chaminade University of Honolulu's clinical psychology doctoral program's aim is to educate and train students employing a practitioner-scholar model so that they will be able to function effectively as clinical psychologists. To ensure that students are adequately prepared, the curriculum is designed to provide for the meaningful integration of psychological science, theory, and clinical practice. The clinical psychology program at the Hawai'i School of Professional Psychology is designed to emphasize the development of knowledge, skills, and attitudes essential in the training of health service psychologists who are committed to the ethical provision of quality, evidence based services to diverse populations and who are able to apply multiple theoretical perspectives to clinical issues.

The Hawai'i School of Professional Psychology at Chaminade University of Honolulu's clinical psychology doctoral program subscribes to the APA Standards of Accreditation. As such, students are expected to establish an identity in and orientation to health service psychology by acquiring the necessary discipline-specific knowledge and profession-wide competencies as follows:

1. Students will demonstrate knowledge of ethical and legal standards relevant to the practice of clinical psychology, including professional ethics that guide professional behavior.
2. Students will develop both communication and interpersonal skills, to include utilization of clear, informative, well-integrated communication, critical thinking, and effective interpersonal skills in professional interactions.
3. Students will demonstrate knowledge of professional values and attitudes as well as self-reflective practice and openness to supervision and feedback.
4. Students will demonstrate competency in individual and cultural diversity, including knowledge of theoretical models and diversity research that serve to guide the application of diversity competence.
5. Students will have knowledge of the history and systems of psychology as well as the basic areas in scientific psychology, including affective, biological, cognitive, developmental, psychopharmacological, and sociocultural aspects of behavior.
6. Students will demonstrate competency in the science of psychology, including knowledge and application of psychometrics, statistical analyses, and quantitative and qualitative research methods.
7. Students will demonstrate competency in psychological assessment, including the ability to administer, interpret, and integrate psychological test results and apply knowledge of strengths and psychopathology to the assessment process.

8. Students will demonstrate competency in clinical intervention, including case formulation, theoretical conceptualization, developing and applying evidence based treatment plans, and evaluating treatment effectiveness in work with clients.
9. Students will evidence knowledge of consultation models and practices, and demonstrate interprofessional and interdisciplinary skills in consultative services.
10. Students will evidence knowledge of supervision models and practices.
11. Students will understand and apply the Marianist values in their professional practice. The application of Marianist values includes applying and adapting social awareness for community service, justice, and peace.

Course Learning Outcomes

1. Students will create a survey, collect data, and analyze the results, understanding methodological and ethical principles involved with human research data collection and application. (Competency 1 & 6)
2. Students will understand the raw data organization involved with hypothesis testing. (Competency 6)
3. Students will understand the core statistical concepts involved in descriptive and inferential statistics. (Competency 6)
4. Students will explore and identify the strengths and weaknesses of the common quantitative analyses used to evaluate human behavior. (Competency 6)
5. Students will be able to select a statistical technique, conduct the analysis using SPSS, and analyze results, when presented with raw data and a research question. (Competency 6)

Required Learning Materials

Required Textbook

Pallant, J. (2020). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS (7th ed.)*. Open University Press. ISBN-13: 9780335249497; ISBN-10: 0335249493

Articles:

- Appelbaum, M., Cooper, H., Kline, R.B., Mayo-Wilson, E., Nezu, A.M., & Rao, S.M. (2018). Journal article reporting standards for quantitative research in psychology: The APA publications and communications board task force report. *American Psychologist, 73*(1), 3-25.
- Barch, D. M., Harms, M. P., Tillman, R., Hawkey, E., & Luby, J. L. (2019). Early Childhood Depression, Emotion Regulation, Episodic Memory, and Hippocampal Development. *Journal of Abnormal Psychology, 128*(1), 81–95.
- Canivez, G. L., Watkins, M. W., & Dombrowski, S. C. (2017). Structural validity of the Wechsler Intelligence Scale for Children—Fifth Edition: Confirmatory factor analyses with the 16 primary and secondary subtests. *Psychological Assessment, 29*(4), 458-472.
- Harrison, M. A., Hughes, S. M., & Gott, A. J. (2019). Sex differences in serial killers. *Evolutionary Behavioral Sciences, 13*(4), 295–310.
- Larsen, J. T., Hershfield, H. E., Stastny, B. J., & Hester, N. (2017). On the relationship between positive and negative affect: Their correlation and their co-occurrence. *Emotion, 17*(2), 323-336.
- Lee, D. J., Bovin, M. J., Weathers, F. W., Palmieri, P. A., Schnurr, P. P., Sloan, D. M., Keane, T. M., & Marx, B. P. (2019). Latent Factor Structure of *DSM–5* Posttraumatic Stress Disorder: Evaluation of Method Variance and Construct Validity of Novel Symptom Clusters. *Psychological Assessment, 31*(1), 46–58.

Course Requirements

1. **Attendance and Participation:** Because much of class time will be spent on procedural tasks, attendance and participation is especially important, as the whole class must progress through the procedure as a group. Therefore, students are expected to attend every class, arrive on time, complete all assigned readings, actively participate in class discussions, complete all in-class assignments, and behave appropriately and professionally at all times. Five points will be awarded per instructional class if the preceding is fulfilled, and points will be deducted accordingly. The first class and last two classes will not be scored. If absent, no points will be awarded. Students will be allowed to drop two attendance scores.

More than two unexcused absences will require additional work and may result in loss of credit for the course. If a student is absent for two classes in a row, they may be dropped from the course.

2. **Selective Theory Sorter (STS):** Complete STS via survey link.
3. **Practice Survey and Data:** Students will create a survey in Forms and collect survey results to prepare for SPSS analysis in subsequent classes. The assignment will be discussed in more detail in class. 25% will be deducted for submissions one day late; 50% for submissions 2 days late; and submissions more than 2 days will not be accepted.
4. **Final Exam:** This will be an in-class exam consisting of varied multiple choice and/or fill-in-the-blank. Content covered will be reading and class information to date. A review discussion will be held prior to the exam. Students late to class will not be allowed extra time to complete the final.
5. **Final Analysis:** This will be an in-class "open-book" assignment. Students will be given a research question along with its raw data. The student will determine the appropriate statistical technique, run the analysis, analyze the results page, decide whether to accept or reject the null hypothesis, and answer related questions. A review discussion will be held prior to the exam. Students late to class will not be allowed extra time to complete the analysis.

Grading

Project/Assignment	Percentage of Total Grade
Attendance and Participation	10%
STS form	5%
Practice Survey and Data	20%
Final Exam	30%
Final Analysis	35%
Total	100%

Grading Scale

Grade point equivalents (and grading scale values) are presented below. Final scores $> .5$ will be rounded up.

A = 4.00 (93-100)	A- = 3.67 (90-92)	
B+ = 3.33 (88-89)	B = 3.00 (83-87)	B- = 2.67 (80-82)
C = 2.00 (70-79); Failed - No credit given		F = 0.00 (≤ 69); Failed - No credit given

Course Policies

Instructor and Student Communication: Questions for this course can be emailed to the instructor. Online, in-person, and phone conferences can be arranged. Response time is up to 2 days.

Cell phones, tablets, and laptops: Out of consideration for your classmates, please set your cell phone to silent mode during class. Students are encouraged to bring laptops or tablets to class as the instructor will assign online activities and readings that will require the use of a laptop or tablet. Laptops and tablets should not be misused, such as checking distracting websites. Use your best judgment and respect your classmates and instructor.

Disability Access: If you need individual accommodations to meet course outcomes because of a documented disability, please speak with me to discuss your needs as soon as possible so that we can ensure your full participation in class and fair assessment of your work. Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from the Counseling Center by the end of week three of the class, in order for instructors to plan accordingly. If a student would like to determine if they meet the criteria for accommodations, they should contact the Kōkua 'Ike Coordinator at (808) 739-8305 for further information (ada@chaminade.edu).

Failure to provide written documentation through the Counseling Center will prevent your instructor from making the necessary accommodations, instructors cannot provide accommodations unless they have been prescribed by the Counseling Center. Once you have received an official notice of accommodations from the

Counseling Center, it is also very important to discuss these accommodations directly with your instructor so that they can better support your needs. If you have specific questions regarding your individualized accommodations you may speak directly with your instructor and/or you may contact the Counseling Center.

Title IX Compliance: Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, you are encouraged to report this matter promptly. Faculty members promote safe and healthy environments, and any sexual, physical, and/or psychological misconduct or abuse will be reported to the Title IX Coordinator. If you or someone you know has been harassed or assaulted, you can find the appropriate resources by visiting Campus Ministry, the Dean of Students Office, the Counseling Center, or the Office for Compliance and Personnel Services.

Attendance Policy: Students are expected to attend regularly all courses for which they are registered. Student should notify their instructors when illness or other extenuating circumstances prevents them from attending class, and they should make arrangements to obtain missed information and complete missed assignments. Notification may be done by emailing the instructor's Chaminade email address, calling the instructor's campus extension, or by leaving a message with the instructor's division office. It is the instructor's prerogative to modify deadlines of course requirements accordingly. Any student who stops attending a course without officially withdrawing may receive a failing grade.

Students may be automatically withdrawn from the class or receive a failing grade if there are three or more absences in a 16-week term or two absences in a row in a 16-week term. With the condensed nature of the 8-week terms, missing class one day (e.g., 6-hours of class) would be equivalent to two absences in a row in a 16-week term.

Students with disabilities who have obtained accommodations from the Chaminade University of Honolulu ADA Coordinator may be considered for an exception when the accommodation does not materially alter the attainment of the learning outcomes. Federal regulations require continued attendance for continuing payment of financial aid. When illness or personal reasons necessitate continued absence, the student should communicate first with the instructor to review options. Anyone who stops attending a course without official withdrawal may receive a failing grade or be withdrawn by the instructor at the instructor's discretion.

Academic Conduct Policy: Any community must have a set of rules and standards of conduct by which it operates. At Chaminade, these standards are outlined so as to reflect both the Catholic, Marianist values of the institution and to honor and respect students as responsible adults. All alleged violations of the community standards are handled through an established student conduct process, outlined in the Student Handbook and HSPP Program Catalog, and operated within the guidelines set to honor both students' rights and campus values.

Students should conduct themselves in a manner that reflects the ideals of the University. This includes knowing and respecting the intent of rules, regulations, and/or policies presented in the Student Handbook and Program Catalog, and realizing that students are subject to the University's jurisdiction from the time of their admission until their enrollment has been formally terminated. Please refer to the Student Handbook and HSPP Program Catalog for more details. A copy of the Student Handbook is available on the Chaminade website (<https://studentaffairs.chaminade.edu/>).

Unless otherwise instructed, all course submissions should follow the formatting of the *Publication Manual of the American Psychological Association, 7th Edition* format. The faculty at the Hawai'i School of Professional Psychology at Chaminade University of Honolulu is dedicated to providing a learning environment that supports scholarly and ethical writing, free from academic dishonesty and plagiarism. This includes the proper and appropriate referencing of all sources. You may be asked to submit your course assignments through an online

authenticity resource (e.g., Turnitin), which helps students and instructors detect potential cases of academic dishonesty.

Technology: A laptop with the following technology may be required in order to complete courses in the Clinical Psychology program: at least Windows 10 (for PCs), at least Mac OS X 10.5.8 (for Macs); a current antivirus program; the current Microsoft Office (PowerPoint and Word) and Adobe Acrobat; a standard web browser; and an internet or broadband connection with speed and connectivity to support internet searches and video conferencing.

Schedule

Week	Date	Topics	Readings Due (to be completed before attending class)	Assignments Due
1	1/12	Introduction, Surveys, STS		
2	1/19	Reliability/Validity. Excel. Exercises (behavioral data; graphing).	Intro, Ch. 1 – 3 Appelbaum et al. (2018)	STS
3	1/26	Converting Excel. Checking for errors. Compiling STS data. Practice Survey discussion.	Intro, Ch. 4 & 5	
4	2/2	IQ/Gender. Descriptive Statistics, Using Graphs. Exercises.	Intro, Ch. 6 & 7,	Practice Survey
5	2/9	Checking Reliability. Choosing a Statistic. Exercises.	Ch. 9 & 10 (skip Ch. 8) Hoijtink et al. (2019)	Practice Survey Data Complete
6	2/16	Correlation, Partial Correlation (IQ & Height). Exercises.	Intro, Ch. 11 & 12 Larsen et al. (2016)	
7	2/23	Multiple Regression, Logistic Regression. Exercises.	Ch. 13 & 14 Barch et al. (2019)	
8	3/2	Factor Analysis. Exercises.	Ch. 15 Canivez et al. (2017) Lee et al. (2019)	
9	3/9	Non-Parametric Statistics. Exercises.	Intro, Ch. 16 Harrison et al. (2019)	
10	3/16	T-tests. Exercises.	Ch. 17	
11	3/23	ANOVA. Exercises.	Ch. 18	
12	3/30	2-way ANOVA.	Ch. 19	
13	4/6	Mixed ANOVA. Exercises. Prepare for Final Exam.	Ch. 20, 21, & 22	
14	4/13	MANOVA (run QI data). ANCOVA Review for Final Exam	Prepare for Final Exam	
15	4/20	Final Exam (multiple choice, fill-in-the-blank) Review for Final Analysis.	Prepare for Final Exam	
16	4/26	Final Analysis	Prepare for Final Analysis	