



**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](http://www.chaminade.edu)

**Course Number:** PP7042-1 & PP7042-1

**Course Title:** Statistic Laboratory

**Department Name:** Hawai'i School of Professional Psychology

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

**Term:** Spring 2020

**Course Credits:** 1.0

**Class Meeting Days:** Tuesdays/Thursdays

**Class Meeting Hours:** 5:50 – 6:50

**Class Location:** Henry Hall 121

**Instructor Name:** Joseph Allen, Ph.D.

**Email:** joseph.allen@chaminade.edu

**Phone:** 808.735.4879

**Office Location:** Hale Hoaloha, 203E

**Office Hours:** Easy, just email for appointment.

### **University Course Catalog Description**

This course provides students with the opportunity to learn the statistics necessary for describing data and evaluating research instruments and the chance to complete analyses associated with the methodologies surveyed in Quantitative Inquiry.

### **Course Overview**

The following topics will be addressed in this course:

- Designing a study and preparing a codebook
- Creating a data file and entering data; Screening and cleaning data
- Descriptive statistics; Scales of measurement
- Graphs and tables
- Choosing the right statistic
- Correlations, Regressions, and Factor Analysis
- Non-parametric tests
- T-tests, ANOVAs, MANOVA, ANCOVA

### **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'eau (Hawai'ian 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

### **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.

### Learning Outcomes

By the end of our course:

- Students will become critical consumers of the statistical research literature in clinical psychology. (Competency 6)
- Students will explore and identify the strengths and weaknesses of the common quantitative analyses used to evaluate human behavior. (Competency 6)
- Students will understand ethical principles involved with human research data collection and application (Competency 1)
- Students will understand the raw data organization involved with hypothesis testing. (Competency 6)
- 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

*Text:*

Pallant, J. (2016). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using the IBM SPSS Program*, 6<sup>th</sup> Edition. Open University Press. ISBN-13: 978-033526154-3; ISBN-10: 033526154-X

*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.

## Grading

### Course Requirements/Methods of Evaluation:

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 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. **Mock Analysis:** The statistical technique will be announced in class. The assignment is to create a hypothesis and data which, after applying the statistical technique, will allow you to reject the null hypothesis (Step 1). Subsequently, you will adjust the raw data to allow you to not reject the null hypothesis (Step 2). Via email, you will submit your Step 1 data file along with the SPSS printout, then submit your Step 2 data file along with the corresponding SPSS printout. Each step is 10 points each, and you will submit both steps (all 4 files) by midnight of the date indicated below. 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.
3. **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.
4. **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 Method

Method	% of Grade
Attendance / Participation	10
Mock Analysis	20
Final Exam	30
Final Analysis	40
Total:	100

### Grading Scale (final scores > .5 will be rounded up)

A = 90 – 100

B = 80 – 89

C = 70 – 79

F = 69 and below

### 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 will take place 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 Counseling Center at (808) 735-4845 for further information.

### **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, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must report the matter 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 make arrangements to 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.

Unexcused absences equivalent to more than a week of classes may lead to a grade reduction for the course. Any unexcused absence of two consecutive weeks or more may result in being withdrawn from the course by the instructor, although the instructor is not required to withdraw students in that scenario. Repeated absences put students at risk of failing grades.

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 the 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 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 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 for more details. A copy of the Student Handbook is available on the Chaminade website.

For further information, please refer to the Student Handbook at <https://studentaffairs.chaminade.edu/>

All sources must be documented through normal scholarly references/citations and all work must be submitted using the *Publication Manual of the American Psychological Association, 7<sup>th</sup> Edition* (2019). Washington DC: American Psychological Association (APA) format. Please refer to Appendix A in the *Publication Manual of the American Psychological Association, 7<sup>th</sup> Edition* for thesis and paper format.

**Scholarly writing:** 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 "Turnitin," ([www.turnitin.com](http://www.turnitin.com)), an online resource established to help educators develop writing/research skills and detect potential cases of academic dishonesty. Turnitin compares submitted papers to billions of pages of content and provides a comparison report to your instructor. This comparison detects papers that share common information and duplicative language.

### Technology

The following technology may be required in order to complete courses in the Clinical Psychology program: For PCs: at least an Intel® or AMD x86 processor running at 1.3 GHz or faster; 4GB of RAM, 10 GB hard drive space, 1024x576 display, and a DVD-ROM drive (video hardware acceleration is optimal); one of the following operating systems: Windows 7, Windows Server 2003 with Service Pack 2 and MSXML 6.0 (32-bit Office only), or Windows Server 2008 or later 32 or 64-bit OS. For Macs: at least an Intel processor, Mac OS X 10.5.8 or later; 1 GB of RAM, 10 GB free hard drive space, 1280x800 display, and a DVD-ROM drive. Current Norton Antivirus (Version 10.2 or higher); Microsoft Office Professional (Version 2010 for PC and 2011 for Mac) containing Powerpoint and Word; Acrobat (full version). 56K or faster Internet or broadband connection; web browser: Microsoft Internet Explorer, Mozilla Firefox, or Google Chrome for PC users, Apple Safari, Mozilla Firefox, or Google Chrome for Mac users.

### Schedule

Class #	Date Sec.1	Date Sec.2	Class Agenda	Due Next Class
1	1/7	1/9	Survey methods, content, companies	Intro, Ch. 1 – 3; Appelbaum et al. (2018)
2	1/14	1/16	Excel Introduction. Exercises (behavioral data; graphing).	Intro, Ch. 4 & 5
3	1/21	1/23	Converting Excel. Checking for errors.	Intro, Ch. 6 & 7, complete STS
4	1/28	1/30	IQ/Gender. Compiling STS data. Descriptive Statistics, Using Graphs. Exercises.	Ch. 9 & 10 (skip Ch. 8)
5	2/4	2/6	Checking Reliability. Choosing a Statistic. Exercises.	Intro, Ch. 11 & 12; Larsen et al. (2017)
6	2/11	2/13	Correlation, Partial Correlation (IQ & Height). Exercises.	Ch. 13 & 14
7	2/18	2/20	Multiple Regression, Logistic Regression. Exercises.	Ch. 15; Canivez et al. (2017)
8	2/25	2/27	Factor Analysis. Exercises. Discuss Mock Analysis.	Intro, Ch. 16; Harrison et al. (2019)
9	3/3	3/5	Non-Parametric Statistics. Exercises.	Ch. 17 & 18; Mock due next class
10	3/10	3/12	T-tests. Exercises.	Ch. 19
11	3/17	3/19	ANOVA. Exercises.	Ch. 20; Barch et al. (2019)
12	3/24	3/26	2-way ANOVA. Mixed ANOVA.	Ch. 21 & 22
13	3/31	4/2	MANOVA. ANCOVA	Notes review
14	4/7	4/9	Exercises. Review. practice.	Prepare for Final Exam.
15	4/14	4/16	Final Exam (multiple choice, fill-in-the-blank). Review for Final Analysis.	Prepare for Final Analysis.
16	4/21	4/25	Final Analysis	