

Measurement, Statistics, and Evaluation of Human Performance

Meeting Days:	M, W	Instructor:	Jacob R. Goodin, Ph.D., CSCS
Meeting Times:	8:30 to 9:35	Phone:	(619) 849-2254
Meeting Location(s):	KIN 2	Email:	jgoodin@pointloma.edu
Final Exam:	Fri 12/14, 7:30 to 10:00a	Office Hours:	Tue-Fri, 2:30-4:00pm, KIN-6

PLNU Mission

To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service becomes an expression of faith. Being of Wesleyan heritage, we aspire to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

COURSE DESCRIPTION

Study of measurement techniques and instruments, descriptive and inferential statistics and evaluation procedures in human performance. Principles and techniques of construction, organization, administration, and interpretation involved in human performance research. Includes critical evaluation of data using basic statistical techniques and an evaluation of research design in human performance- related studies.

COURSE LEARNING OUTCOMES

- Identify the basic concepts of measurement, testing, and evaluation in physical education & exercise science
- Describe important issues related to the ethical use of human subjects in research and the role of the institutional review board in protecting them.
- Apply basic statistical procedures in data analysis, utilize Excel and SPSS for statistical analyses and be able to accurately interpret the output
- Apply basic quantitative statistical procedures in data analysis including descriptive statistics, chi-square, t-tests, correlation, regression, and 1- and 2-way ANOVA with post-hoc tests.
- Define and differentiate the concepts and types of reliability, objectivity, and validity used to evaluate norm-referenced and criterion-referenced data
- Define and interpret the measurement issues associated with epidemiology and clinical settings
- Use descriptive and inferential statistics to make decisions.

COURSE GRADING AND ASSIGNMENTS

- Group Learning Activities

- Assignments
- Online Quizzes
- Final Exam

10

Total: 800pts

The final grade percentage will be rounded to the nearest percent with grades being recorded as follows:

Grade	Percent	Grade	Percent	Grade	Percent
A	93 - 100	B-	80 - 82.9	D+	67 - 69.9
A-	90 - 92.9	C+	77 - 79.9	D	63 - 66.9
B+	87 - 89.9	C	73 - 76.9	D-	60 - 62.9
B	83 - 86.9	C-	70 - 72.9	F	0 - 59.9

EDUCATIONAL OPPORTUNITIES

Note: All assignments are to be submitted electronically via Canvas

- 1) **Labs:** These group activities will take place in the classroom or computer lab.
- 2) **Assignments:**
- 3) **Textbook Reading:** Regular reading assignments will be assigned from the textbook in order to come prepared for the upcoming classes and be able to participate in the discussions and perform well on quizzes.
- 4) **Online Quizzes:**
- 5) **Final Exam:**

TENTATIVE COURSE SCHEDULE

Wk #	Date	Class Content	Assignment Due	Location
Wk 1	Tue, 8/28	Lecture: Course Intro, Ch. 1 Concepts in Tests and Measurements	Quiz 1, Lab 1	
	Wed, 8/29	Lab: Research Proposal I		
Wk 2	Mon, 9/3	Labor Day	Assignment 1	
	Wed, 9/5	Lecture: Research Design in Human Performance		
Wk 3	Mon, 9/10	Lecture: Ch. 3 Descriptive Statistics & Normal Distribution	Quiz 2, Lab 2	Comp. Lab
	Wed, 9/12	Lab: Descriptives lab (& Intro to SPSS & Excel)		
Wk 4	Mon, 9/17	Lecture: Ch. 4 Correlation	Assignment 2	Comp. Lab
	Wed, 9/19	Lab: Correlation	Quiz 3, Lab 3	
Wk 5	Mon, 9/24	Lecture: Ch. 4 Prediction	Assignment 3	Comp. Lab
	Wed, 9/26	Lab: Prediction	Quiz 4, Lab 4	
Wk 6	Mon, 10/1	Lecture: Ch. 5 Inferential Statistics: Chi-square & t-tests	Assignment 4	

	Wed, 10/3	Lab: Differences between two groups	Quiz 5, Lab 5	Comp. Lab
Wk 7	Mon, 10/8	Human Subjects Training	Assignment 5	
	Wed, 10/10	Midterm Review		
Wk 8	Mon, 10/15	Midterm	Quiz 6, Lab 6	
	Wed, 10/17	Lab: Research Proposal II		
Wk 9	Mon, 10/22	Lecture: Ch. 5 Inferential Statistics: ANOVA	Assignment 6	
	Wed, 10/24	Lab: Differences between multiple groups	Quiz 7, Lab 7	Comp. Lab
Wk 10	Mon, 10/29	Lecture: Ch. 6 Norm-Referenced Reliability and Validity	Assignment 7	
	Wed, 10/31	Lab: Validity and Reliability I	Quiz 8, Lab 8	Comp. Lab
Wk 11	Mon, 11/5	Lecture: Ch. 7 Criterion-Referenced Reliability an Validity	Assignment 8	
	Wed, 11/7	Lab: Validity and Reliability II	Quiz 9, Lab 9	Comp. Lab
Wk 12	Mon, 11/12	Lecture: Chs. 9-12 Human Performance Testing	Assignment 9	
	Wed, 11/14	Lab: Human Performance Testing	Quiz 10, Lab 10	Comp. Lab
Wk 13	Mon, 11/19	Conduct Research	Assignment 10	
	Wed, 11/21	Thanksgiving		
Wk 14	Mon, 11/26	Conduct Research	TBD	
	Wed, 11/28	Write up research		
Wk 15	Mon, 12/3	Write up research		
	Wed, 12/5	Write up research		
Wk 16	Mon, 12/10	Final Exam		

REQUIRED TEXTS AND RECOMMENDED RESOURCES

Required:

Morrow, J. R., Jr., Mood, D. P., Disch, J. G., & Kang, M. (2015). *Measurement and Evaluation in Human Performance* (5th ed.). Champaign, IL: Human Kinetics.

Recommended:

Field, A. (2017). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). London, UK: Sage Publications Ltd.

LATE AND INCOMPLETE ASSIGNMENTS

All assignments are to be submitted/turned in according to the specified time in Canvas. Late assignments/quizzes will be docked 20% per day, with assignments/quizzes submitted over 5 days late receiving a 0. Completes will only be assigned in extremely unusual circumstances.

FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examination on its scheduled day, Friday 12/14, 7:30 to 10:00a. No requests for early examinations or alternative days will be approved.

PLNU COPYRIGHT POLICY

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See [Academic Policies](#) for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMODATIONS POLICY

If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) within the first two weeks of class to demonstrate need and to register for accommodation by phone at 619-849- 2486 or by e-mail at drc@pointloma.edu. See [Disability Resource Center](#) for additional information.

PLNU ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. See [Academic Policies](#) in the Undergraduate Academic Catalog.

TUTORING

The PLNU Tutorial Center is available free of charge for all current, undergraduate PLNU students. It offers tutoring for most subjects, as well as for general help with paper editing, study skills, etc. The Tutorial Center is located on the south end of Bond Academic Center, next to the Study Abroad offices. Tutoring is available by appointment only, may be arranged in person at the Tutorial Center, over the phone at (619) 849 2593, or via email at TutorialServices@pointloma.edu.

OFFICE HOURS

It is important to me that I get to know each of you on an individual level, so stop by and say hi! My official office hours (listed above) are tentative—other meetings or appointments may arise—so schedule 24 hours in advance if you have pressing issues, but feel freedom to stop by whenever you'd like. I have an open door for questions, nerdy training theory discussions, or if

you just need someone to listen and pray for you. I often won't have all the answers, but I'm positive we can figure it out together!