

San José State University
Kinesiology Department
Fall 2017, KIN 175, Measurement & Evaluation

Instructor: Dr. Bethany Shifflett
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Office Hours: 10:30-11:30 Mondays; 2:30-3:30 Tuesdays; and by appointment
Class Meetings: Tuesdays 4-5:50pm; DMH 227
Lab Meetings: MH 321
Prerequisites: KIN 70; GE Math (e.g., stat 95, Math 10)

Course Description

Designed to develop an understanding of measurement and evaluation concepts relevant to assessment in the psychomotor, cognitive and affective domains. Activities include collection and computer analysis of data. Prerequisites: KIN 70; GE Math Course.

Bring evidence of pre-requisites to the 2nd Friday lab.

Web Resource

Course materials, including the course calendar, may be found on the e-campus web site: <http://www.sjsu.edu/at/ec/canvas/>. You are responsible for regularly checking the Canvas discussion board, announcements, and email for information and messages. Login using your mysjsu username and password.

Course Goals and Student Learning Objectives

Following lectures, assigned readings, and practice, students will be able to demonstrate through an analytical project, exams, an SPSS assignment, and quizzes

- ▶ the ability to apply measurement concepts and theory to assess performance in the cognitive, affective and motor domains
- ▶ the ability to communicate measurement and statistical concepts and their application for assessment of performance in Kinesiology
- ▶ the ability to discern when and how to take into consideration group characteristics (e.g., age, gender, culture) in order to examine social justice and equity issues in Kinesiology.
- ▶ the ability to 1) construct, evaluate, and administer cognitive and skills tests, 2) carry out, interpret, and report statistical analysis of data for both formative and summative evaluation, 3) select appropriate techniques for assessment of performance in various situations, 4) assess objectivity,

reliability and validity of classifications and scores, 5) use software (SPSS) to analyze data, and 6) make criterion referenced (CR) and norm referenced (NR) interpretations of data.

- ▶ knowledge of techniques and issues (test construction, administration, evaluation) surrounding assessment in the motor, cognitive and affective domains.

Program Learning Outcomes (PLO)

At the end of a Bachelor of Science degree program in the Department of Kinesiology students should be able:

- ▶ explain, identify, and/or demonstrate the theoretical and/or scientific principles that can be used to address issues or problems in the sub-disciplines in kinesiology.
- ▶ effectively communicate in writing (clear, concise and coherent) on topics in kinesiology.
- ▶ effectively communicate through an oral presentation (clear, concise and coherent) on topics in kinesiology.
- ▶ utilize their experiences across a variety of health related and skill-based activities to inform their scholarship and practice in the sub disciplines in kinesiology.
- ▶ identify and analyze social justice and equity issues related to kinesiology for diverse populations.

Required Texts/Readings

Course reader required. Available at Maple Press (located at 330 South 10th Street).

Additional Resources

- ▶ The university has a site license for the software (SPSS) used in this class. To get a copy for free, you can download the software from this URL: <http://its.sjsu.edu/services/software/>
- ▶ Dr. Shifflett's SPSS Guide - specific to KIN 175 - available at Maple Press.
- ▶ An optional text is available at the bookstore: How to Use SPSS Statistics: A Step-by-Step Guide to Analysis and Interpretation by Brian Cronk - ISBN 1-884585-92-2 (Publisher: [Pyrzczak](#))

Class Notes

- ▶ Set aside time each week (6hr) for this class. You should not take this course in a semester when it will be difficult to find plenty of time to invest in this class.
- ▶ Labs and practice materials are on the Canvas web site. Complete all as they are excellent preparation for quizzes and exams.
- ▶ You should save data analysis work and data files from every lab as they will be needed for quizzes.
- ▶ SPSS is available on computers in the CASA computer labs (MH 321), on the library's laptops, and in the open use area of the student success center in Clark Hall (ground floor).
- ▶ Take advantage of my office hours (by appointment or drop in).
- ▶ Scores and final grades will be posted in Canvas.
- ▶ Individual extra credit work will not be given.
- ▶ Students may not record lectures (Videos of major topics are available on Canvas).
- ▶ Course materials developed by Dr. Shifflett (e.g., exam/quiz items and answers, videos, labs or solutions, lecture notes), are her intellectual property and cannot be shared in any form without her approval.

- ▶ Classroom protocol: It is expected that you will arrive on time for all class meetings and labs, come prepared with work done in advance when needed, take notes throughout lectures, put away and turn cell phones silent, and use laptops/ipads for course work only. If you need to leave early from class, let Dr. Shifflett know in advance. If you arrive late or need to leave early, please sit in the back row. If you want to use your laptop/ipad, please arrive early enough to get a seat in the front row.

Course Requirements and Grading

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course. This would include preparing for class, participating in course activities, and completing assignments/projects/labs. Generally this will amount to 6 hours a week outside of class. Out of 250 points, 175 points are needed to pass (C-).

Course Component	Points
Exam 1	50 points
Exam 2	50 points
Exam 3	50 points
Data Analysis Project	40 points
Quizzes	55 points
Lab Presentation	5 points

Grading Scale used to determine final grade for the course.

Percentage Earned	Equivalent Grade
97% - 100%	A+
93% - 96%	A
90% - 92%	A-
87% - 89%	B+
83% - 86%	B
80% - 82%	B-
77% - 79%	C+
73% - 76%	C
70% - 72%	C-
67% - 69%	D+
63% - 66%	D
60% - 62%	D-
below 60%	F

Tests:

- Written tests: There will be three exams covering conceptual information drawn from lecture, discussions, web-based information, course reader, labs, and assigned reading. Item formats may include multiple choice, hybrid-multiple choice, true-false, fill in, or short answer.
 - Written exams will not require the use of SPSS.
 - Written exams will not be re-scheduled and cannot be made up (extraordinary circumstances considered).

Quizzes:

- Written quizzes: There will be 8 timed quizzes covering conceptual and analytical information drawn primarily from the course text, readings, and lecture. Item formats may include multiple choice, short answer, true-false, and fill in. Quizzes will include analytical work requiring the use of SPSS.
 - For quizzes taken within Canvas, two attempts are allowed - one at the end of Friday labs and one outside of class/lab time. Quizzes will not be re-scheduled and cannot be made up. If you miss lab, you can only take the quiz one time outside of class.

Assignments/Activities:

- Data Analysis Project
 - Independently or with a partner or a small group (max 3), students conduct an analysis of data obtained from a survey of recreational activities.
- Bonus activities:
 - SPSS Challenge: In lab, groups of students will be presented with a set of analytical questions based on the IronMatch data. Each question will require the use of SPSS to answer. A maximum of 10 points may be earned.
 - Bonus quiz: There will be a bonus quiz (10 points possible) on the last topic of the course.
 - Team Match: In lab, this is a team-based activity surrounding data analysis. A maximum of 6 points may be earned.

Campus Resources

Information pertaining to university programs and policies designed to facilitate student success can be found here:

<http://www.sjsu.edu/gup/syllabusinfo/>

Course Calendar

Tentative Course Calendar: changes with reasonable notice will be posted on Canvas

KIN 175 Fall 2017 Calendar			8/25 Introduction; Measurement Scales; Assessment; using SPSS
8/29 Percentages; SPSS review & new - FDT, Xtabs	9/1 Lab 1 SPSS Review & Practice	9/5 Normal Curve; CT, Variability; SPSS	9/8 Lab 2; Quiz 1 (percentages, CT, V)
9/12 Review; Percentiles; SPSS	9/15 Lab 3; Quiz 2 (normal curve, percentiles)	9/19 Correlation, Prediction; SPSS	9/22 Lab 4; Quiz 3 (correlation, prediction)
9/26 Cognitive Assessment Item Analysis; SPSS	9/29 Lab 5; Quiz 4 (cog. assessment, item analysis)	10/3 Review - Q & A & QFRs	10/6 Exam 1
10/10 Validity (Scores); SPSS	10/13 Lab 6; Project Help	10/17 Reliability, Objectivity (Scores); SPSS	10/20 Lab 7 (Rel, Obj); Quiz 5 (V,R,O scores)
10/24 Mastery Testing Validity (Classifications); SPSS	10/27 Lab 8 (validity); Project Due 5pm	10/31 Reliability, Objectivity (classifications)	11/3 Lab 9 (Rel, Obj); Quiz 6 (V,R,O classifications)
11/7 Review Q&A Review QFRs	11/10 (NO CLASS) Veteran's Day	11/14 Exam 2 - Psychometrics	11/17 Team Match
11/21 Assessment motor domain - basic abilities; sport skills; physical fitness	11/24 (NO CLASS) Thanksgiving Break	11/28 Assessment - Affective Domain; Grading	12/1 Lab 10, 11; Quiz 7 (assess motor & affective domains; grading)
12/5 Standard Scores & Data Profiling	12/8 Lab 12 SPSS Challenge Bonus Quiz due noon Sunday	Final Exam: Tuesday 12/19; 5:15-7:30pm Bring scan form (large blue sheet) - #T&E 0200	