

Evaluation in Physical Education ([PEP4400](#))

Spring 2019

COURSE DESCRIPTION

Evaluation in Physical Education is a three-credit course introducing principles of measurement and evaluation through the lens of physical education, exercise science, and physical therapy. Content will emphasize (a) principles that will aid in consuming research as a health scientist-practitioner and (b) techniques that can be readily implemented in related professional settings.

The structure of this course requires both consistent attendance and individual study—some content will be presented only during lectures and some only in the required textbook. Evaluation of learning in this course is designed to facilitate learning as much as evaluate content mastery. Therefore, there will be no comprehensive mid-term or final examinations. Instead, (a) brief, cumulative quizzes and labs will be due weekly, and (b) at the end of the semester, you will present data that you collected and analyzed during the semester.

LEARNING OBJECTIVES

1. Describe principles of observations and measurement, including threats to internal validity.
2. Describe single-subject research designs, including strengths and limitations.
3. Describe between-group research designs, including strengths and limitations.
4. Use software to conduct basic statistical analyses.
5. Demonstrate practical competency in Objectives 1–4 through design, implementation, and presentation of a research study.

Instructor – David M. Cole, M.S., BCBA

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Phone Number – (904) 345-0104

Office Hours – By request, HPER 145

Teaching Assistant – Jessica Harrison
(jessica.harrison1@aggiemail.usu.edu)

Required Textbook – Morrow, J., Mood, D., Disch, J. G., & Kang, M. (2016). *Measurement and evaluation in human performance* (5th ed.). Champaign, IL: Human Kinetics.

Grading Rubric

Assignment Type	Count	Points per Assignment	Points Subtotal	Percentage Subtotal
Quizzes	20 (+5)	10	200 (+50)	60 (+15)
Labs	5	10	50	15
Research Participation	3 h (+2 h)	6/hour	18 (+12)	5 (+4)
Final Presentation	1	70	70	21
Total (+extra credit):			338 (+62)	100 (+19)

ASSIGNMENT TYPES

Quizzes (20 + 5)

Quizzes will be presented during 25 classes throughout the semester. Scheduling of quizzes will generally be unannounced. Any content presented in prior **lectures and assigned readings** may be tested.

It is possible to complete only 20 of 25 quizzes (80%) and still score 100% in this course. Thus, 5 quizzes (20%) effectively count as extra credit (see *Late Assignments* for more information). However, this is not how points are technically structured. Instead, every quiz will total 8 points (80%) and include at least 2 bonus points (20%).

What to expect:

- Content will be **cumulative**.
- Quizzes will consist of approximately 10 questions in a **variety of formats**. Note that fill-in-the-blank questions will usually emphasize content previously tested in a multiple-choice format (encouraging progression from recognition memory to recall memory).
- You will have **10 minutes** to complete quizzes.
- Quizzes will be presented on paper, requiring **pen or pencil** for completion.
- **No calculator or computer** will be required.
- Allow approximately one week for **grading quizzes**.

Labs (5)

Five computer-based laboratories will be announced throughout the semester. Laboratories will give you hands-on practice with an **open-source statistical software** package (i.e., JASP). The purpose of laboratories is learning *how* to conduct common statistical analyses, not merely arriving at the correct answer, so carefully note how laboratories are scored below.

What to expect:

- Laboratories will necessarily be **cumulative**, with initial laboratories introducing basic functionality and later laboratories testing more advanced functionality that could be useful for final presentations.
- For each laboratory, you will have **unlimited practice attempts** and **one graded attempt**. It is unlikely that full points will be earned without first completing practice attempts.
- You will have unlimited time to complete practice attempts and **1 hour** to complete graded attempts. If you take advantage of practice attempts, graded attempts should require no more than 10 minutes.
- Practice attempts will not be proctored, as you may reference outside resources (e.g., fellow students; YouTube tutorials). Graded attempt will be **proctored**, as **no outside resources** will be permitted.
- Laboratories are **due** before midnight 1 week from availability.

Free Proctoring Options

Virtual Proctoring

Requirements: [Chrome-based browser](#), [Proctorio Chrome extension](#), webcam, microphone, ≥0.25 Mbps Internet connection, photo identification (e.g., student ID, driver's license), and preferred statistical software

Directions: Click on an available lab in Canvas and follow the onscreen prompts ([FAQ](#))

USU Testing Center

Requirements: Photo identification

Directions: Follow standard scheduling procedures for testing center; staff will have access codes for graded attempts

- Laboratories will seemingly be immediately and automatically graded. However, your automated grade may not reflect your final grade. First, each laboratory will include 1 point for uploading your work from JASP correctly; this point must be manually scored. Second, more importantly, you can obtain correct answers by completing practice laboratories. However, **points for correct answers will be docked from your graded attempt if you do not show the necessary work.**

Research Participation (3 hours + 2 hours)

To aid in designing and implementing a study for your final presentation, you will participate in at least 3 hours of research through [SONA](#), with up to 5 hours of participation available for credit (i.e., an additional 2 hours may be completed for extra credit).

What to expect:

- The 3 required hours will be due **before spring break**, after which you will begin your own data collection. The optional 2 additional hours may be completed any time prior to the last day of class.
- Because SONA credit must be transferred manually to Canvas, the **grading** book will only be updated to reflect research participation a few times throughout the semester.

Final Presentation (1)

Towards the second half of the semester, students will directly apply course content to the design and completion of a research study. The culmination of this process will be a graded, in-class presentation. Presentations will include five components corresponding to common subsections of a research article:

1. **Introduction:** Discuss significance of research question and briefly review extant research
2. **Methods (Research Design):** Justify choice of research design and illustrate procedure either in-situ or with video-recording
3. **Methods (Data Analysis):** Justify choice of analytical procedures and demonstrate how analysis was conducted
4. **Results:** Report outcomes of data collection and analysis with graphs and/or tables
5. **Discussion:** Discuss significance and limitations of findings

To distribute work-load as well as expedite presentations, studies will be conducted in **groups of approximately five students**. On day of presentation, group members will be randomly assigned to present on one of the five graded components. Thus, although work-load (e.g., data collection) will be distributed across the group and groups may lean on individual expertise (e.g., a member more fluent in statistical software), all students must understand all components of their study (i.e., the research question, research design, data analysis, results, and interpretation of results).

Each component will be worth 14 points for a total of 70 possible points. All members of each group will receive the same grade, the sum of points earned for presentation of individual components of the study. Only under extreme circumstances in which a group member poorly contributed to/prepared for a presentation should groups petition for an exception.

COURSE POLICIES

Late Assignments

Late assignments will not be accepted for grading, and quizzes will not be rescheduled.

Because quizzes will require attending class with a degree of consistency that may prove infeasible for some students and technical issues sometimes arise with computer-based assignments (i.e., laboratories), 62 bonus points will be offered to all students by default. Thus, you can miss more than 6 quizzes/labs and still score 100% in this course.

Also note that if you anticipate being away from campus when a laboratory is due, graded attempts may be completed with Proctorio.

Given these policies, **exceptions to deadlines** will be generally unavailable. Examples of non-exceptions include transportation difficulties and trips out of town. Please do not petition for an exception in these or similar situations, as the alternative is that individual exceptions are considered but the 62 bonus points are eliminated. Examples of acceptable exceptions include major illness documented by a physician, documented death in the family, and away-games for athletes on request of the athletic office. For approved exceptions, the assignment will not be rescheduled; instead, it will be left unscored.

Grading Scale

A	100–93%
A-	92–90%
B+	89–87%
B	86–83%
B-	82–80%
C+	79–77%
C	76–73%
C-	72–70%
D+	69–67%
D	66–60%
F	59–0%

Final grades will be rounded up to the nearest full point

Communication

Important **course announcements** will be disseminated in-class and/or through Canvas. Ensure that you have set your [Canvas preferences](#) to receive e-mail notifications of announcements.

Grades will be primarily communicated via the gradebook in Canvas. Post-grading, hard copies of quizzes will also be available for pickup during class. Minor clerical errors are inevitable. Notice of errors should be politely directed to jessica.harrison1@aggiemail.usu.edu.

Technical difficulties with Proctorio should be directed to support@proctorio.com. All other technical difficulties (e.g., with Canvas) should be directed to servicedesk@usu.edu.

All other **course-specific inquires**, should be directed to dcole@observechange.org.

Disabilities

All requests for accommodations from the [Disability Resource Center](#) (DRC) will be honored if communicated directly from the DRC.

Academic Honesty

All suspected violations of the [student code](#) will be reported to Utah State University and may result in a failing grade on the affected assignment and possibly the course.

Sexual Harassment and Grievances

If you are a victim of sexual harassment, please call the Affirmative Action/Equal Employment Opportunity Office at (435) 797-1266 or file a complaint in-person at Old Main, Room 161. If you have otherwise been treated unfairly, please file a grievance through as directed by [Article VII](#) of the Student Code.

Auto Access Textbook

This course includes a fee for access to an electronic version of the course textbook. If you can obtain the textbook for less than the course fee or prefer a hard copy, you are encouraged to [opt out](#) of the Auto Access program no later than January 28, 2019, in which case your course fee will be refunded.

If you choose to remain in the program, the eBook can be accessed under [Modules](#) in the Canvas course.

Intellectual Property

All course content is copyrighted. You will be provided with the option to download slides, take home quizzes, and retain other course content; however, please avoid disseminating course materials, particularly quiz and laboratory questions. **You are working for your grade—allow others the opportunity to work for theirs.**

Course Attribution

David Cole, MS, BCBA is a doctoral student in the Perception-Action Laboratory at Utah State University.

With humans and animal models, he studies the neuroscience of decision-making, including the role of higher-order neural processes in reactive balance. Previously, he directed a center for children with disabilities (e.g., autism, mental retardation, traumatic brain injury).