

CSRF 6351

Statistical Analysis & Presentation of Human Performance Data



Instructor: Dr. Allyn Byars, PhD, CSCS

Email: allyn.byars@angelo.edu

Phone: 325.486.6166

Office: CHP 204B

Office Hours: by appointment

Course Information

Course Description

The course will involve examination, interpretation, and presentation of various categories of human performance associated with applied health and sport-related investigations. This will include data collection using laboratory assessments designed for measuring attributes relative to human performance. Additional requirements will consist of basic analysis of collected data followed by presentation of results using common methods for reporting individual and group results from applied research encompassing health and sport-related performance.

Note: the course will meet in the lab and will utilize all available equipment related to the aforementioned.

Course Credits

Three credit hours

Prerequisite and Co-requisite Courses

None

Prerequisite Skills

Example: Accessing Internet websites, using ASU Library resources, and proficiency with Microsoft Word and/or PowerPoint are expectations of the CSRF 6351.

Program Outcomes

Upon completion of the program of study for the Coaching, Sport, Recreation and Fitness degree, the graduate will be prepared to apply the knowledge and skills required to develop a research project, submit a proposal for IRB approval, collect and analyze research data, interpret results of various statistical procedures, and present the findings in a poster presentation.

Student Learning Outcomes

Student Learning Outcome By completing all course requirements, students will be able to:	Assignment(s) or activity(ies) validating outcome achievement:
demonstrate independent problem solving and critical thinking skills by asking appropriate research questions	Exams, quizzes, and data analysis
demonstrate the ability to organize, analyze, synthesize, and interpret statistical data	Exams, quizzes, and data analysis
summarize the results of data analysis in a professional format	Data analysis and presentation of results
demonstrate a basic awareness of research questions and how to apply appropriate statistical techniques to answer these questions.	Exams, quizzes, and data analysis
identify historical events and demonstrate an understanding of the essential	Exams, quizzes, CITI training and IRB proposal/consent form development
develop skills for conducting applied research	CITI training and IRB proposal/consent form development

Course Delivery

This is a face-to-face course with learning resources and supplemental materials posted in Blackboard. This includes lecture, discussion, and practical experience through various computer laboratory assignments.

Required Texts and Materials

None

Recommended Texts and Materials

None

Technology Requirements

- A computer capable of running Windows 7 or later, or Mac OSX 10.8 or later
- The latest version of one of these web browsers: internet Explorer, Firefox, or Safari
- Microsoft Office Suite or a compatible Open Office Suite
- Adobe Acrobat Reader
- Internet Access
- Understand the use of Blackboard

Topic Outline (tentative)

1. CITI IRB Training
2. Types of Measurement
3. Validity and Reliability of Data
4. Applied Research Design
5. Descriptive Statistics
6. Probability and the Normal Curve
7. Elementary Inferential Data Analysis
8. Applied Research Presentation

Communication

Faculty will usually respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

Written communication via email: All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

Grading

Evaluation and Grades

Course grades will be determined as indicated in the table below.

Assessment	Points of Total Grade
Laboratory Data Collection	50
Quizzes	100
Comprehensive Exams	200

Assessment	Points of Total Grade
CITI Training	15
IRB Proposal/Consent Form	10
Presentation	25
Total	400

Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

A = 360-400 points

B = 320-359 points

C = 280-319 points

F = < 280 points

Teaching Strategies

The course will include lecture, discussion, and practical experience through various computer and survey design assignments. Students are expected to be “active learners.” It is a basic assumption of the instructor that students will be involved (beyond the materials and lectures presented in the course) discovering, processing, and applying the course information using peer-review journal articles, researching additional information and examples on the Internet, and discussing course material with their peers.

Assignment and Activity Descriptions

Exams and Quizzes

Scheduled exams (**200 points**) and quizzes (**100 points**) will be announced throughout the semester and consist of multiple-choice questions. Questions will be taken from the weekly lectures and classroom activities.

Laboratory Data Collection

Each individual will be responsible for collecting data from various laboratory assessments. Collected data will be utilized for the purpose of statistical analysis, interpretation, and presentation of results. Scheduled computer laboratory assignments consisting of data analysis and interpretation will be announced throughout the semester (**50 points**). These assignments will be announced and scored as either complete or incomplete.

IRB proposal/consent form

An IRB proposal and Consent Form (**10 points**) will be assigned and developed based on the individual's hypothetical research project. The assignment will be announced and scored as either complete or incomplete.

CITI training

CITI training (**15 points**) is an online program for educating and assessing one's knowledge concerning human subjects research (HSR) for social, behavioral, and educational research. The assignment will be announced and scored as either complete or incomplete.

Presentation

A presentation (**25 points**) based on the results from analyzed data collected in the laboratory will be constructed and presented in applied research form. Collected data presented by each individual will be approved in advance by the professor. The assignment will be announced and scored as either complete or incomplete.

POLICY ON MISSED EXAMS AND QUIZZES

Exam and Quiz dates are shown on the course schedule. Faculty reserves the right to determine if a make-up will be allowed. Exceptions to this policy are on a case by case basis and in alignment with Angelo State University policy.

POLICY ON LATE OR MISSED ASSIGNMENTS

Assignment due dates are shown on the course schedule. Instructions for all assignments will be discussed in class prior to the due date. Questions and concerns should be asked then. Questions will not be answered the day in which an assignment is due. Faculty reserves the right to deduct points from late and/or incomplete assignments. Exceptions to this policy are on a case by case basis and in alignment with Angelo State University policy.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)¹
- [Angelo State University Catalog](#)²

Student Responsibility and Attendance

The following classroom policies and student responsibilities will be enforced:

1. There will be no smoking or use of smokeless tobacco.
2. There will be NO use of cell phones (including TEXT MESSAGING) or any other unauthorized electronic equipment during lectures and quizzes. Use of cell phones during class is strictly prohibited. Upon entering the

classroom turn all cell phones and/or other handheld electronic devices off to prevent distractions affecting other student's learning opportunities.

3. Please be considerate to others while in class. Classroom conversations will be limited to the lecture discussions only
4. Professional behavior is expected. Everyone in the classroom is considered to be an adult professional and therefore should conduct themselves as one.
5. It is the student's responsibility for the information discussed in class even in lieu of one's absence. It is also the student's responsibility for all work and is encouraged to have a contact within the class. All students are encouraged to set up an appointment to meet with the professor as needed throughout the duration of the course. The purpose of the aforementioned is to provide additional assistance in understanding the concepts presented in the course.
6. There are NO extra credit opportunities in this course. Therefore, please do not inquire about such and/or raising your grade particularly at the end of the semester.
7. If you have a scheduled personal trip during the day of the final, you will need to **drop** the course or **cancel** the trip. The final will only be given on the day in which it is scheduled by the university. There are **NO** exceptions unless you are required to be present at a university sponsored event.

Attendance Policy

Students are expected to attend all scheduled class meetings. Attendance will be taken each class meeting. If a student arrives to class late or leaves early, it is the student's responsibility to inform the instructor as to the reason. Chronic failure to attend class *will* affect your final grade in this class. This also includes students consistently arriving late or leaving early and/or leaving and coming back to class during the scheduled meeting time. Exceptions to this policy will be made on a case by case basis and in alignment with Angelo State University policy. It is also the student's responsibility for the information discussed in class even in lieu of one's absence. It is also the student's responsibility for all work and is encouraged to have a contact within the class. All students are encouraged to set up an appointment to meet with the professor as needed throughout the duration of the course.

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Health and Human Services adheres to the university's [Statement of Academic Integrity](#).³

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the [Student Disability Services website](#).⁴ The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#)⁵ for more information.

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for [Observance of Religious Holy Day](#)⁶ for more information.

Copyright Policy

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

Syllabus Changes

The faculty member reserves the option to make changes as necessary to this syllabus and the course content. If changes become necessary during this course, the faculty will notify students of such changes by email, course announcements and/or via a discussion board announcement. It is the student's responsibility to look for such communications about the course on a daily basis.

Title IX at Angelo State University

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Boone, J.D. You may submit reports in the following manner:

Online: www.angelo.edu/incident-form

Face to face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: michelle.boone@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit: www.angelo.edu/title-ix.

Student Evaluation of Faculty and Course

Students in all programs are given the opportunity to evaluate their courses and the faculty who teach them. Evaluations are most helpful when they are honest, fair, constructive, and pertinent to the class, clinical experience, or course. Faculty value student evaluations, and use student suggestions in making modifications in courses, labs and clinical experiences.

Angelo State University uses the IDEA (Individual Development and Educational Assessment) system administered through Kansas State University for all course evaluations. The Office of Institutional Research and Assessment administers IDEA for the entire university, online and has established a policy whereby students can complete course evaluations free from coercion.

1. Gaining a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories)
2. Learning to apply course material (to improve thinking, problem solving, and decisions)
3. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course
4. Acquiring skills in working with others as a member of a team
5. Learning appropriate methods for collecting, analyzing, and interpreting numerical information

End of Syllabus

¹ <https://www.angelo.edu/student-handbook/>

² <https://www.angelo.edu/catalogs/>

³ <https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>

⁴ <https://www.angelo.edu/services/disability-services/>

⁵ <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

⁶ <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>