

# HHPK 617 Statistical Procedures in Health & Human Performance Spring 2024 Section 01W; 3 semester hours

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Office Location: Nursing & Health Sciences #116
Office Hours: By Appointment, TR 11a-2p, or Virtual

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Preferred Form of Communication: Email Communication Response Time: 24-48 hours

#### **COURSE INFORMATION**

**Textbook:** Weir, J. P. & Vincent, W.J. (2021). *Statistics in kinesiology.* 5th edition. Human Kinetics: Champaign, IL. (Inclusive Access for textbook, see D2L)

**Materials:** provided within the course. *Note:* This course is delivered fully online and will require the ability to interact with YouTube videos. Many school districts block the use of YouTube.

**Software:** Throughout this course, we will utilize statistics software known as *Statistical Packages for the Social Sciences (SPSS)*. This software is available in the university open computer labs. Many students purchase a student version of the software. Others have SPSS available where they work. You should utilize version SPSS 16 or higher.

#### **Course Description**

This course provides an introduction to statistical methods and their implications for health and human performance- specific situations as well as educational researchers. Appropriate computer applications will be integrated with classroom content relating to populations and samples; organizing, displaying, and summarizing data; probability; normal distribution; tests of significance; correlation and simple regression; Z and T tests; and the chi square test. (3 credit hours)

# **Student Learning Outcomes**

- 1. Describe the nature of probability and statistics.
- 2. Organize data using distribution curves; explain the normal distribution.
- 3. Describe data via statistical processes.
- 4. Utilize confidence intervals based on sample size.

The syllabus/schedule are subject to change.

- 5. Perform hypothesis testing.
- 6. Apply statistical methods to and evaluate various forms of human performance data.
- 7. Effectively use SPSS to perform statistical calculations.
- 8. Critique statistical methods

#### **COURSE REQUIREMENTS**

#### **Minimal Technical Skills Needed**

Students must have working knowledge of and know how to use the MyLeo Online: D2L Brightspace learning management system, and Microsoft Word/Excel/PowerPoint. Students must utilize their University assigned email (Leo mail) for all course communications. All email communication from the instructor will be sent to the student's Leo mail.

# Student Responsibilities or Tips for Success in the Course

Students can expect to do well in this course when they attend class on-time, complete all assignments/discussions/quizzes/exams, etc., and seek assistance when they do not understand course material. Students should also utilize the course resources provided through D2L, such as, course lecture notes, assignments, and course information. This course will require using D2L. It is the students responsibly to have internet access, check this site frequently, and become familiar with how it works. Students should check their MyLeo email often for course announcements.

#### Grading

Each assignment will be worth a pre-determined amount of points. Upon the completion of the course, grades will be calculated by adding up the total number of points each student has earned and dividing it by the total amount of points available in the course. This will produce a percentage of points earned (Ex. Student earned 850 points out a possible 1000 in the course: 850/1000 = 85% "B"). Grades will be assigned based upon the percentages below.

Module Exams: 50 points each

Reflections: 20 points each

Group Assignments: 30 points each

Discussion: 20 points C = 70-79%Total Points = 920 C = 70-69% C = 70-50

Students are expected to earn points toward their final grade during the course of the semester with the assignments and tests that are scheduled. Extra Credit Assignments WILL NOT be given at the end of the semester. All students are graded based on the exact same criteria and no exceptions will be made for individual assignments, tests, or final point values.

Students will receive back all graded assignments in a timely manner (typically within 1 week of the due date). Students are encouraged to keep all graded assignments as well as keep up with their grades throughout the semester. Any questions or concerns about assignments/grades should be brought to the instructor's attention immediately (i.e. Do not wait until the end of the semester)

#### **ASSESSMENTS**

#### **Module Exams**

A grade up to 50 points can be earned on the lesson module exams. Please keep in mind that this is a master's level research tools course. When you take the exams, make notes regarding the questions and your responses. Students are responsible for determining the accuracy of your answers. Students are also responsible for the identification of reasons a particular question may have been missed. Take responsibility for your learning. Work with and through your study group to master the material.

#### Reflections

Each module will require that you submit reflections as a Word document.

# **Group Assignments**

Students will create their own groups. The group should establish rules of operation and hold every member accountable. Please indicate on the first page of the project the names of those who participated, as well as, the module for which the project is intended. Group assignments will be awarded a grade ranging from 30 downward. Students are strongly encouraged to collaborate to master the concepts and exams.

Establish rules for the operation for your group. Hold every member accountable. Do not cover for anyone who does not participate! Each group is free to go through the stages of storming, forming, and norming. I suggest getting to the norming stage as quickly as possible. DO NOT LET A NON-PARTICIPANT HOLD BACK THE PROGRESS OF YOUR GROUP. Set due dates and require all members of the group to comply. I know that working in groups is frustrating; however, the modern workplace is about group work. Teaming is a critical skill for success in today's world.

#### **Late Work**

All assignments are due as assigned and must be turned in on or before the due date to receive full credit. Assignments turned in after the due date will receive zero (0) points. It is the student's responsibility to be aware of assignment due dates that are posted on D2L.

# TECHNOLOGY REQUIREMENTS LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\_support.html

#### ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

#### **COMMUNICATION AND SUPPORT**

If you have any questions or are having difficulties with the course material, please contact your Instructor.

# **Technical Support**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here: https://community.brightspace.com/support/s/contactsupport

#### Interaction with Instructor Statement

Email is the best way to contact the instructor if you need assistance with any aspect of the course. Instructor will typically respond to emails within 24 hours (except on weekends). Students are also welcome to utilize instructor's office hours if they prefer a face to face conversation. Please include HHPK 617 in the subject line of your email.

# **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

#### Attendance

This is an online course. All assignments have deadlines which must be met; however, you can submit any assignment at any time before the deadline. It is the student's responsibility to be aware of assignment due dates as the dates are posted on D2L. In the case of missing deadlines due to unavoidable or emergency situations, or illness (including Covid), the student must promptly notify the instructor via email explaining the circumstances. Prompt notification (within three days) is required to have an absence excused; additionally, written documentation may be required to have the absence excused. Assignment deadlines may be modified for students with excused absences. Technical and/or computer problems associated with D2L are not a valid excuse for turning in an assignment late. **NO LATE ASSIGNMENTS WILL BE GRADED.** 

# **Syllabus Change Policy**

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

# **University Specific Procedures**

#### **Student Conduct**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

#### **TAMUC Attendance**

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

# **Academic Integrity**

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

<u>Undergraduate Academic Dishonesty 13.99.99.R0.03</u>

Undergraduate Student Academic Dishonesty Form

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

#### **AI Tools**

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course. Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

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Like an encyclopedia or a dictionary or Wikipedia, AI tools can be used to begin the process of writing; in other words, it is a tool for preliminary research, not a reliable source. Preliminary research assists writers in learning the basics about a topic so that they can research the specifics using credible, academic sources which can be cited in the assignment. Thus, AI is used to generate ideas in the same way that a brainstorm or a Freewrite is used in the prewriting stage of the writing process. While no one would drop a brainstorm into a formal document, the ideas that are generated from the brainstorm can be developed as part of a writing assignment. The same is true of AI. In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

#### Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact: **Office of Student Disability Resources and Services,** Velma K. Waters Library Rm 162, Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148

Email: <a href="mailto:studentdisabilityservices@tamuc.edu">studentdisabilityservices@tamuc.edu</a>

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

# **Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

## **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer. Web url:

 $\frac{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf$ 

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

# **A&M-Commerce Supports Students' Mental Health**

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit <a href="https://www.tamuc.edu/counsel">www.tamuc.edu/counsel</a>

# **COURSE OUTLINE / CALENDAR**

Week	Section	Due at 11:59p
1/29	Course Introduction	Mon, 2/5
2/5 & 2/12	Section 1: Terms & Concepts	Mon, 2/19
2/19 & 2/26	Section 2: Normal Distribution Curve	Mon, 3/4
3/4	Section 3: Confidence Intervals	Mon, 3/18
3/11	Spring Break	
3/18	Section 4: Advanced Confidence Intervals	Mon, 3/25
3/25	Section 5: Hypothesis Testing	Mon, 4/1
4/1 & 4/8	Section 6: T-Test using SPSS	Mon, 4/15
4/15	Section 7: ANOVA	Mon, 4/22
4/22	Section 8: Linear Regression	Mon, 4/29
4/29	Section 9: Chi-Squared Distribution & Non- Parametric Designs	Mon, 5/6