# HHPK 617.01W
# Statistical Procedures in Health & Human Performance

COURSE SYLLABUS: SPRING 2020

## INSTRUCTOR INFORMATION

**Instructor:** Dr. Tara Tietjen-Smith, MCHES
**Office Location:** Nursing & Health Sciences Building – NHS 115
**Office Hours:** By Appointment either Face-to-Face or by Phone
**Office Phone:** 903-886-5545
**Office Fax:** 903-886-5365
**University Email Address:** Tara.Tietjen-Smith@tamuc.edu
**Preferred Form of Communication:** email
**Communication Response Time:** 24 to 48 hours on week days

## COURSE INFORMATION

### Materials – Textbooks, Readings, Supplementary Readings

*Recommended Textbook(s)*: (All are free downloads.)

Lane, D. (2003). *Introduction to statistics*. Rice University: David Lane.
https://open.umn.edu/opentextbooks/textbooks/introduction-to-statistics

Lane, D. *Online statistics education: A multimedia course of study* http://onlinestatbook.com/

Lane, D. *Introduction to statistics: An interactive e-book.* Apple Books.  Details to download:
https://books.apple.com/us/book/introduction-to-statistics-an-interactive-e-book/id684001500

Additional materials provided within the course.

**Note:** This course is delivered fully online and will require the ability to play online videos. Please be aware that some school districts block the use of YouTube. Towards the end of this course we will utilize a piece of 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, human performance, sport, educational researchers, and beyond. Appropriate statistical 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:**
By the end of the course, the successful student will:
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.
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

## Instructional / Methods / Activities Assessments

**Instructional / Methods / Activities Assessments**

**Writing Requirements**
All papers are to follow APA format guidelines. Begin papers with an APA title page. Font is to be 12 point, New Times Roman, double spaced. Normal margins: one inch left, right, top, and bottom.
Written assignments will be graded according to the following criteria:
- Completeness of response to the assignment: 40% of grade
- Organization and coherence: 40% of grade
- Appropriate grammar, punctuation, spelling: 15% of grade
- Use of disciplinary format and citation style: Paper displays correct use of student′s disciplinary format and citation style (APA, 6th Edition) for papers submitted for presentation or publication.
- https://owl.english.purdue.edu/owl/resource/560/01/ Purdue OWL Writing Lab

**Lesson Module Exams (40% of final grade)**
A grade up to 50/50 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. You are responsible for determining the accuracy of your answers. You are also responsible for the identification of reasons a particular question may have been missed. I want you to take responsibility for your learning. Work with and through your study group to master the material.

**Discussion Participation (20% of final grade)**
A grade will be assigned for participation in the discussion group for each module. A grade of 0 is given to students who do not participate in the discussion forum.

**Reflection (10% of final grade)**
Each module will require that you post thoughts to the journal. The same participation grading methodology will be utilized for reflection activities as that utilized for discussion participation (up to 10 points). A grade of 0 is given to students who do not participate in the discussion forum.

**Group Assignments (30% of final grade)**
Students will create their own groups. The group should establish rules of operation and hold every member accountable. Please indicate on each assignment the names of those who participated as well as the project module. Group assignments will be awarded a grade ranging from 30 downward. I strongly encourage you 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. Working in groups may be frustrating; however, teamwork is a critical skill for success in today's world.

**Grading**
Your grade will be determined through a combination of your scores on the module exams, participation in the discussion groups, reflection assignments, and group projects. Each of these will carry assigned weight to determine your final grade. Keep in mind that discussions and reflections assignments are graded. They make up a part of your grade as does the content mastery exam. You must participate in these activities.

The following final grading scale will be utilized to determine the final grade based on the average of your course work:

A = 90 to 100
B = 80 to 89
C = 70 to 79
D = 60 to 69
F = under 60
Your grade will be calculated by dividing the total points earned by the total possible points.

# Instructional Methods

**Class Participation**
Systematic and timely on-line participation is expected. University policy notes that excused absences include (i) participation in an authorized university activity, (ii) illness verified by a physician, (iii) death in the immediate family, and (iv) verifiable, official court appearance. Keep in mind that this course has been developed to allow maximum flexibility in regard to your online access. You are not required to logon at specific times on specific dates. You will work with other members of the class on specific tasks; however, this activity is determined by the group.

## Assignments Submitted by Deadlines

Assignments are due as stated. Class participants are strongly recommended to participate in their assigned groups. Numbers generate strength. Teamwork is an essential soft-skill in every academic environment. Individual team members will be evaluated; however, teams often rise or fall together. Every team should select a lead member. Problems regarding team participation should be discussed with the course instructor. Team members will be allowed to grade each other's performance in order to be fair.

## Respect Differing Views

As with all graduate courses, this course deals with ideas. Please be respectful of individuals with ideas and beliefs that differ from your own. If you disagree with someone then ask them why they believe as they do, and then listen to the answer. People can have complex reasoning for what is seen as, on the surface, a simple idea. Only civil discussions will be permitted in class.

## Examination Policy

Exams are timed, but they are open book and may be taken in a group.

## Dropping the Class

If you need to adjust your schedule by dropping this course, please follow university procedures to officially drop the class. If you fail to officially drop the class, a failing grade shall be assigned at the end of the course. Incompletes: Per university policy is granted only for circumstances beyond student's control which prevented the student from attending classes during Finals Week or the preceding three weeks (Policy A 12.07, 1998; http://www.tamuc.edu/admissions/registrar/generalInformation/dropAdd.aspx).  The extension cannot exceed one semester. Failure to fulfill plan requirements within the specified time will result in an F.

## Course Communication

**Course communication will occur through your MyLeo Account.** You will need to regularly and systematically review your e-mail on a timely basis. The best way to reach me is via email (Tara.Tietjen-Smith@tamuc.edu) as I check it frequently. I will reply within 24 hours to your MyLeo email address during the regular work week. Please be courteous and professional in all of your interactions with me and fellow students.

## Writing Center

Students are encouraged to visit the A&M-Commerce Writing Center for writing assistance. Visit the website at:
http://web.tamuc.edu/academics/colleges/humanitiesSocialSciencesArts/departments/literatureLanguages/writingCenter/default.aspx

# TECHNOLOGY REQUIREMENTS

## Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of

supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

## Desktop Support

| Browser | Supported Browser Version(s) | Maintenance Browser Version(s) |
|---------|------------------------------|-------------------------------|
| Microsoft® Edge | Latest | N/A |
| Microsoft® Internet Explorer® | N/A | 11 |
| Mozilla® Firefox® | Latest, ESR | N/A |
| Google® Chrome™ | Latest | N/A |
| Apple® Safari® | Latest | N/A |

## Tablet and Mobile Support

| Device | Operating System | Browser | Supported Browser Version(s) |
|---|---|---|---|
| Android™ | Android 4.4+ | Chrome | Latest |
| Apple | iOS® | Safari, Chrome | The current major version of iOS (the latest minor or **point** release of that major version) and the previous major version of iOS (the latest minor or **point** release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser. |
| Windows | Windows 10 | Edge, Chrome, Firefox | Latest of all browsers, and Firefox ESR. |

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
    - 512 MB of RAM, 1 GB or more preferred
    - Broadband connection required courses are heavily video intensive
    - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

- You must have a:
    - Sound card, which is usually integrated into your desktop or laptop computer
    - Speakers or headphones.
    - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.

- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: JAVA web site  http://www.java.com/en/download/manual.jsp

- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.
      Pop-ups are allowed.
      JavaScript is enabled.
      Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
  - Adobe Reader  https://get.adobe.com/reader/
  - Adobe Flash Player *(version 17 or later)* https://get.adobe.com/flashplayer/
  - Adobe Shockwave Player  https://get.adobe.com/shockwave/
  - Apple Quick Time  http://www.apple.com/quicktime/download/

- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

# 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

## Brightspace Support

### Need Help?
### Student 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 or click on the **Live Chat** or click on the words "click here" to submit an issue via email.

### System Maintenance

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

### Interaction with Instructor Statement

I will return your grades within one week of assignment submission in most circumstances. Please email me if you have a question or are unable to view your grades at tara.tietjen-smith@tamuc.edu

# COURSE AND UNIVERSITY PROCEDURES/POLICIES

## Course Specific Procedures/Policies

**Late Assignments**

Late assignments will lose one letter grade (10%) per day late. The measurement of days ends at 11:59pm the following day of class. A new day begins at Midnight (12 am) at continues to 11:59 pm.

## 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: Netiquette http://www.albion.com/netiquette/corerules.html

## TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01. 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:

Undergraduate Academic Dishonesty 13.99.99.R0.03

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

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

## ADA Statement

### Students with Disabilities

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**
Texas A&M University-Commerce
Gee Library- Room 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu
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 Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:
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.