UNIVERSITY OF TEXAS AT TYLER DEPARTMENT OF HEALTH & KINESIOLOGY

COURSE SYLLABUS

Introduction to Biostatistics HECC 4333.060 3 Credits, Fall 2022

Instructor: Claire Baetge, PhD

Department of Health and Kinesiology

Office: Online via web conference

Phone: E-mail is preferred Email: cbaetge@uttyler.edu

Office hours: By appointment only

COURSE DESCRIPTION: Study of tests of fitness, functional capacity, and other variables commonly used in health and kinesiology programs. Test protocols and proper data collection, reduction of test data, and application of norms and criteria are emphasized.

REQUIRED TEXT: Baumgartner, Ted A. Jackson, Andrew S., Mahar, Matthew T., and

Rowe, David A. Measurement for Evaluation in Kinesiology, 9th Ed.,

(ISBN-13: 978-1-284-04075-3)

PREREQUISITE: N/A

COURSE OBJECTIVES: Upon successful completion of this course, students will demonstrate:

- 1. Knowledge of the basic concepts of measurement and evaluation including basic datagathering techniques and statistical analysis of skills utilizing SPSS
- 2. The application of measurement and evaluation concepts to real life situations
- 3. Effective techniques in appropriate test construction, administration, and evaluation
- 4. Effective evaluation of human performance, including cognitive, affective, psychomotor, and health-related fitness

GRADING:

| Grade Components | Point Value |
|----------------------------------|----------------------|
| Introductory Discussion | 40 |
| Topic Sign-Up | 20 |
| Professionalism | 50 |
| Midterm Exam | 200 |
| 11 Quizzes | 110 (10 points each) |
| 10 Homework Assignments | 100 (10 points each) |
| Measurement & Evaluation Project | 200 |
| (Data Collection) | |
| Measurement & Evaluation Project | 200 |
| (Presentation of Data) | |
| Project Discussion Responses | 80 |
| TOTAL | 1000 |

There are 1,000 points possible in this course. Your final course grade will be based on the total number of points earned as follows:

A = 900 - 1000 points

B = 800 - 899 points

C = 700 - 799 points

D= 600 - 699 points

 $\mathbf{F} = <600 \text{ points}$

EVALUATION:

<u>Midterm Exam</u>: This multiple choice exam will be comprised of material from lectures, readings, quizzes and homework assignments completed during the didactic portion of the course.

<u>Quizzes:</u> There will be 10 quizzes that will comprise the preceding lecture material. No weekly quiz grade will be dropped. A syllabus contract quiz will also be given.

<u>Homework Assignments</u>: There will be 10 homework assignments designed to reinforce learning and/or to give students an opportunity to transfer classroom knowledge into application situations. Homework assignments are to be the student's own work. No homework assignments will be accepted late or will be dropped.

<u>Measurement and Evaluation Project</u>: Two grades will be earned for the semester project—one for administration and analysis of testing and a second for the project presentation. The students are to choose a test described in various textbook chapters, or other tests outside of the textbook chapters upon approval from the instructor. Upon completion of the test and

measurement aspect of the project, the students will present the findings to the class. The class presentation will include a PowerPoint presentation with the following: 1) an overview of the history and importance of testing this particular performance, 2) why the specific test was used, 3) descriptive, inferential, and summative statistical findings related to the test. This will be the fun part of the class. The more imagination and creativity used, the better the experience.

<u>CANVAS</u>: Canvas will be used to deliver course content for this class. You can access Canvas through the *UT Tyler Logins* link at the top of the UT Tyler main website (you will need your ID and password). Important class resources, including the syllabus, course schedule, course content, announcements, and external links, as well as the learning modules, will be accessed here. The *GETTING STARTED* module will explain the different Canvas functions that you will use in this class.

<u>Online Content:</u> The content of this course is organized into modules and will be accessed in the MODULES tab in Canvas. Each module will be broken down into weekly coursework. Within each module, you will find learning objectives and various avenues to learn the content, such as assigned readings, recorded lectures and/or videos associated with the reading assignments, a quiz over the assigned content, and an assignment to complete.

You will have a week to complete each module. As an asynchronous course, there are not "fixed" meeting days. Weekly modules will be open Monday-Sunday; module assignments, quizzes, and discussion post responses must be completed no later than Friday by 11:59pm.

The lectures are intended to emphasize the concepts that I think are most important, organized in a sequence that facilitates learning. The textbook readings and the lectures may overlap, but there is also much information presented in the textbook that I do not present in the lectures, and vice versa. Therefore, it is important that you read and study the concepts presented both in the online video lectures as well as in the textbook and PowerPoints.

ATTENDANCE: Responsibility for class attendance rests with the student. When a student has a university-excused absence, make-up work is able to be scheduled. The university reserves the right to consider individual cases of nonattendance. In general, students are graded on the basis of intellectual effort and performance. In many cases, class participation is a significant measure of performance, and nonattendance can adversely affect a student's grade. When, in the judgment of the instructor, a student has been absent to such a degree as to jeopardize success in the course, the instructor informs the Office of Student Records that the student is to be dropped from the course.

APPROVED STUDENT ABSENCES

Student Absence due to Religious Observance

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

Student Absence for University-Sponsored Events and Activities

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time

the instructor will set a date and time when make-up assignments will be completed. On those occasions when it may be necessary for students to miss a regularly scheduled class in order to participate in an official university event or activity, faculty sponsors and program directors are requested to observe the following procedures:

- 1. Faculty sponsors or program directors should draft a memorandum to the vice president for academic affairs. This memorandum should include information concerning the nature of the event, the date(s) on which students would be absent from class, and the names of the students involved.
- 2. Copies of the memorandum addressed to the vice president should be given to each of the students listed on the memorandum.
- 3. Students should be directed to communicate with their instructor(s) prior to the date of the planned absence.

It is expected that students will not abuse the privilege of being absent from class for authorized university activities, and that make-up assignments will be made at the discretion and convenience of the instructor.

COURSE POLICIES/EXPECTATIONS:

- 1. It is expected that everyone will complete the assignments for each class meeting *prior* to class.
- 2. If you have special learning needs, please inform me on the first day of class.
- 3. Please allow up to one week for assignment and quiz grades to be posted.
- 4. Academic dishonesty (cheating, plagiarism, copying, etc) will not be tolerated and will result in a failing grade for the semester.
- 5. Student inquiries via email will be answered within 48 hours Monday-Friday.
- 6. Extra credit should not be expected. Please do not ask if there are any extra credit opportunities, in order to raise your grade.
- 7. If you find yourself struggling in the class (especially if you fail an exam or any quizzes), you should meet with me as soon as possible so that we can determine what steps you need to take to succeed in the class. I'm available to videoconference, or discuss via Canvas or email.
- 8. Students are expected to behave in a respectful manner (both with other students as well as with the instructor). Questions are highly encouraged, but please re-read any e-mails or discussion posts prior to sending. "Professionalism" points can be affected due to poor e-mail composition.

<u>Announcements</u>: I will post Announcements at least once a week. You will be able to see these announcements on your course portal page. Please check these frequently so you do not miss any important information.

<u>E-mail communication</u>: Instructors are required to use your Patriot account e-mail address for e-mail correspondence. Therefore, any e-mail message originating from me will be sent to your Patriots account. If you use an e-mail account other than your Patriot account you may want to set up your account so that it pushes your Patriots account e-mail to your personal inbox. Most announcements on the class Canvas page will also be sent to your Patriot e-mail address.

Professionalism: Students are expected to maintain a professional disposition at all times.

<u>Preparation:</u> Students are expected to prepare for class by completing the weekly lessons prior

to class. Furthermore, students are strongly encouraged to use the online resources provided by the publisher and Primal Pictures as supplemental material. Although we will not cover everything from the assigned reading in the online lectures, it still should be considered a source for exam questions.

<u>Participation:</u> Students are strongly encouraged to ask, and respond to questions. This student/instructor interaction makes for more interesting sessions and facilitates better learning.

<u>Lecture notes:</u> Students are expected to take notes from the video lectures. Summary PowerPoint slides will be provided.

<u>Review of material:</u> Students are expected to review material daily; as a general rule you should spend 2-3 hours per week per credit hour outside of class reviewing material. This means you should be spending 6-9 hours per week for this class.

<u>Exams</u>: Students will be expected to use ProctorU for the midterm exam. Students may not discuss the content of the exams with other students. It would be in violation of the honor code.

<u>Make-up:</u> Unless you contact the instructor ahead of time, late assignments will not be accepted. Contact the instructor before the due date if you will be unable to complete the assignment on time and have a university excused absence. Coursework must be submitted within Canvas. Please do not email the instructor assignments and/or projects unless otherwise asked to. A missed exam without a prior excuse receives an automatic zero. An excused, missed exam must be taken before the next class (arrange with instructor).

PLAGIARISM/FRAUD:

As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings,etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. This includes, but is not limited to, working on lab reports with anotherstudent and changing the names on the printed report, copying data from another student for a labthat you did not attend, and forging data from a lab you did not attend. The work that you hand in is expected to be original and to be your own. There is *no tolerance* forpersons who plagiarize and/or cheat. You are expected to consult Subchapter 8-800 of the University of Texas at Tyler Manual of Policies and Procedures for Student Affairs: Student Conduct and Discipline available at www.uttyler.edu/mopp/chapter8.html. *Any* act of cheating orplagiarism will result in dismissal from the course. Per university guidelines, the student(s) will bereported to the department head with failure of the course as the recommended course of action.

COPYRIGHT:

The handouts used in this course are copyrighted. The term "handouts" refers to all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems,in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

The following University policies must appear on each course syllabus or be provided as an informational sheet (web-links to these policies may be used in the print or electronic syllabus)http://www.uttyler.edu/academicaffairs/syllabuspolicies.pdf

STUDENTS RIGHTS AND RESPONSIBILITIES:

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link:

http://www2.uttyler.edu/wellness/rightsresponsibilities.php

GRADE REPLACEMENT/FORGIVENESS AND CENSUS DATE POLICIES:

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the CensusDate of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at

<u>http://www.uttyler.edu/registrar</u>. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in theinformation pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercisegrade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions that students need to beaware of. These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/NoCredit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a "W"grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

STATE-MANDATED COURSE DROP POLICY:

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter fromdropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar forthe specific date).

Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

DISABILITY SERVICES:

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University offers accommodations to students with learning, physical and/or psychiatric disabilities. If you have a disability, includingnon-visible disabilities such as chronic diseases, learning disabilities, head injury, PTSD or ADHD, or you have a history of modifications or accommodations in a previous educational environment you are encouraged to contact the Student Accessibility and Resources office and schedule an interview with the Accessibility Case Manager/ADA Coordinator, Cynthia Lowery Staples. If you are unsure if the above criteria apply to you, but have questions or concerns please contact the SAR office. For more information or to set up an appointment please visit the SAR office located in the University Center, Room 3150 or call 903.566.7079. You may also send an email to cstaples@uttyler.edu

STUDENT ABSENCE DUE TO RELIGIOUS OBSERVANCE:

Students who anticipate being absent from class due to a religious observance are requested toinform the instructor of such absences by the second class meeting of the semester.

STUDENT ABSENCE FOR UNIVERSITY-SPONSORED EVENTS/ACTIVITIES:

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that timethe instructor will set a date and time when make-up assignments will be completed.

SOCIAL SECURITY AND FERPA STATEMENT:

It is the policy of The University of Texas at Tyler to protect the confidential nature of socialsecurity numbers. The University has changed its computer programming so that all studentshave an identification number. The electronic transmission of grades (e.g., via email) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

EMERGENCY EXITS AND EVACUATION:

Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

TECHNICAL INFORMATION:

If you experience technical problems or have a technical question about this course, you canobtain assistance by emailing itsupport@patriots.uttyler.edu or call 903.565.5555.

When you email IT Support, be sure to include a complete description of your question orproblem including:

• The title and number of the course

- The page in question
- If you get an error message, a description and message number
- What you were doing at the time you got the error message

Plug-ins and Helper Applications

UT Tyler online courses use Java, JavaScript, browser plug-ins, helper application and cookies. It is essential that you have these elements installed and enabled in your web browser for optimalviewing of the content and functions of your online course. Always ensure that you are using themost update version for the browser you choose to access the online learning content.

NOTE: Mozilla Firefox is the recommended browser for Canvas. (URL:http://www.mozilla.org/en-US/firefox/new/)

- **Adobe Reader** allows you to view, save, and print Portable Document Format (PDF)files. (URL: http://get.adobe.com/reader/)
- **Java Runtime Environment** (JRE) allows you to use interactive tools on the web.(URL: http://www.java.com/en/download/)
- Adobe Flash Player allows you to view content created with Flash such as interactiveweb applications and animations.
 (URL: http://get.adobe.com/flashplayer/)
- **QuickTime** allows users to play back audio and video files.(URL: http://www.apple.com/quicktime/download/)
- Windows Media Player allows you to view, listen and download streaming video and audio. (URL: http://windows.microsoft.com/en-US/windows/products/windows-media-player)
- **RealPlayer** allows you to view and listen to streaming video and audio.(URL: http://www.real.com/)

SPSS

We will be using SPSS statistical software for our statistical analyses.

Accessing SPSS: 1) If you are on campus, you can access it in most (if not all) student-designated computer station, such as the library, the Business Computer Lab, the Nursing Computer Lab, and the Health & Kinesiology Computer Lab; 2) If you are off-campus, you can access it by logging-in to one.uttyler.edu → select the catalog tab → open the Horizon icon → open IBM SPSS Statistics 28 icon (you may need to disable pop-ups); or 3) You can rent the software for your personal computer.

Netiquette Guide

"Netiquette" is network etiquette, the do's and don'ts of online communication. Netiquette coversboth common courtesy online and informal "rules of the road" of cyberspace. Review and familiarize yourself with the guidelines provided.

(URL: http://www.learnthenet.com/learn-about/netiquette/index.php)

TOBACCO FREE:

- All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of theUniversity community, including students, faculty, staff, University affiliates, contractors, and visitors.
- Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and allother tobacco products.
- There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free.

Class Schedule: All assigned coursework is due by 11:59pm on the date stated in the syllabus.

| Wee | k | Ch(s) | Topic(s) | Assignment(s) |
|------------------------|--------|--------|--|--|
| Date | Module | CII(s) | Topic(s) | |
| Week 1 8/22-8/28 | 1 | | Introductory Lecture | Ice-breaker Discussion: 8/26 Semester Topic Sign-Up: 8/28 Syllabus Contract Quiz: 8/28 |
| Week 2 8/29-9/4 | 2 | 1 | 9/2 Census Day Introduction to Measurement and Evaluation; Practice in SPSS | HW 1: 9/2 Quiz 1: 9/2 |
| Week 3 9/6*-9/11 | 3 | 2 | 9/5 Labor Day Holiday No Classes Practical Aspects of Testing | HW 2: 9/9 Quiz 2: 9/9 |
| Week 4 9/12-9/18 | 4 | 3 | Statistical Tools Practice Standard Scores Practice Calculation of Correlation and Prediction | HW 3: 9/16 Quiz 3: 9/16 |
| Week 5 9/19-9/25 | 5 | 4 | Reliability and Objectivity Practice Inferential Statistics | HW 4: 9/23 Quiz 4: 9/23 |
| Week 6 9/26-10/2 | 6 | 5 & 7 | 9/26 Midterm Grades Validity PAR-Q Practice Test Characteristics, Administration, and Interpretation | HW 5: 9/30 Quiz 5: 9/30 |
| Week 7 10/3-10/9 | | 1-5 | Midterm Review Midterm: 10/7-10/8 | |
| Week 8 10/10-10/16 | 7 | 6-7 | Physical Activity and Sedentary Behavior Aerobic Fitness Project Information Preparation | HW 6: 10/14 Quiz 6: 10/14 |
| Week 9 10/17-10/23 | | | Body Composition Musculoskeletal Fitness Data Collection | HW 7: 10/21 Quiz 7: 10/21 |
| Week 10 10/24-10/30 | 8 | 8-9 | Youth Fitness and Physical Activity Grading and Standard Setting Data Collection | HW 8: 10/28 Quiz 8: 10/28 |
| Week 11 10/31-11/6 | 9 | 10-11 | 11/4 Last Day to Withdraw Authentic/Alternative Assessments Sport Skill Presentation Preparation | HW 9: 11/4 Quiz 9: 11/4 |
| Week 12 11/7-11/13 | 10 | 12-13 | Knowledge Tests and Questionnaires Presentation Preparation | HW 10: 11/11 Quiz 10: 11/11 |
| Week 13 11/14-11/20 | 11 | 14 | Presentations | Semester Project: 11/19 |
| Week 14 11/21-11/27 | 12 | | Thanksgiving Holiday No Classes | |
| Week 15 11/28-12/4 | | | Course Wrap-Up | Project Discussion Responses: 12/2 |