

**UNIVERSITY OF TEXAS AT TYLER  
DEPARTMENT OF PUBLIC HEALTH**

**COURSE SYLLABUS**

**Introduction to Biostatistics  
HECC4333.001  
Spring 2024, T 9:30-10:50AM, HPC3010**

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**Instructor:** Reuben J. Cowan, M.S.  
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**Office hours:** M 10-11AM; T 11AM-Noon

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**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. Measurement for Evaluation in Kinesiology 9<sup>th</sup> Ed., (ISBN-13: 978-0073376554), Humanities & Social Science, 2015.

**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 data-gathering 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:**

<b>Grade Components</b>	<b>Percentage (based on 100% total) of Overall Course Grade</b>
Midterm Exam	30%
4 Quizzes (each covering previous lecture material)	20%
5 Homework Assignments	10%
Measurement & Evaluation Project (Individual Grade—Data Collection)	20%
Measurement & Evaluation Project (Individual Grade—Presentation of Data)	20%

Grading will be based on a modified 10-point scale (average): A = 89.5 - 100; B = 79.5 - 89.4; C = 69.5 - 79.4; D = 59.5 - 69.4; F = below 59.5

Standard rounding procedures will be used, no exceptions.

## **EVALUATION:**

*Midterm Exam:* this exam will comprise material from lectures, readings, quizzes and homework assignments completed during the didactic portion of the course. It most likely will comprise both objective as well as subjective questions.

*Quizzes:* there will be 4 quizzes that will comprise the preceding lecture material. No quiz grades can be dropped.

*Homework Assignments:* there will be 5 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, and none will be accepted late. No homework assignments can be dropped.

*Measurement and Evaluation Project:* two grades will be earned for this project—one for administration 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. The students are to test and measure the performance of the class (student labs). 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 power point presentation include the following: 1) an overview of the history and importance of testing this particular performance, 2) why test was used, 3) descriptive, inferential, and summative statistical findings related to the test. A pilot test will be demonstrated initially with subsequent presentation of the findings so the class will know what is expected. This will be the fun part of the class....so make it fun. The more imagination and creativity used, the better the experiences

for all involved. Students should also attempt to meet in person and with the instructor when possible to advance the completion of the project.

**Canvas:** Power point slides, study questions, and assignments will all be posted to Canvas for student accessibility.

**ATTENDANCE:** No formal attendance record will be maintained until group labs and presentations are conducted. Excused absences recognized by the University include religious observance or University sponsored events/activities. In the event of illness, a student must obtain a doctor's note either from his/her physician or the campus health clinic. If an absence is excused because of either circumstance, the student will be allowed to make up work assigned during the didactic part of the course. It should be remembered, however, that all quizzes and assignments will be given on the dates noted in the following course outline—no exceptions. There will be no make-up of quizzes, assignments or the midterm for unexcused absences. Of course, a good attendance record is always highly recommended for the duration of the semester, as good attendance has a high correlation with higher grades!!! **However, MANDATORY ATTENDANCE is required during the group labs and group presentations. If a student chooses not to attend class on those dates (disregarding the excused situations noted above), he/she will receive a zero for either his/her individual grade or group grade, whichever applies (corresponding to the day missed). There are 5 mandatory class days during the student run lab (20% off individual grade for each missed mandatory attendance) and 2 mandatory class days corresponding to the project presentations (50% off individual grade for each missed mandatory attendance).**

**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. Cell phones must be turned to "OFF" or "SILENT" (not VIBRATE) during class. Do not take calls or text others during class.
4. Please do not participate in any activity in the classroom that may be a distraction to other students or the instructor. This includes talking to neighbors during lectures or discussions, surfing the web, texting, instant messaging, checking e-mail, etc.
5. Please allow up to one week for assignment and quiz grades to be posted.
6. Food and drinks are prohibited in university classrooms.
7. Academic dishonesty (cheating, plagiarism, copying, etc) will not be tolerated and will result in a failing grade for the semester.
8. Students arriving 15+ minutes late to class during a mandatory attendance day will be counted absent unless appropriate notification has been given to the instructor prior to class.
9. Student inquiries via email will be answered within 48 hours Monday-Friday

### **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 another student and changing the names on the printed report, copying data from another student for a lab that 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* for persons 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](http://www.uttyler.edu/mopp/chapter8.html). Any act of cheating or plagiarism will result in dismissal from the course. Per university guidelines, the student(s) will be reported 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 Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at <http://www.uttyler.edu/registrar>. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information 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 exercise grade 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 be aware of. These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.

- 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 from dropping 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 for the 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, including non-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](mailto:cstaples@uttyler.edu)

**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/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.

**SOCIAL SECURITY AND FERPA STATEMENT:**

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) 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 can obtain assistance by emailing [itsupport@patriots.uttyler.edu](mailto:itsupport@patriots.uttyler.edu) or call 903.565.5555.

When you email IT Support, be sure to include a complete description of your question or problem 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

You may also visit the Help Tab in Blackboard <http://wiki.uttyler.edu/display/B8H/Home> for useful information or check out **On Demand Learning Center for Students** <http://ondemand.blackboard.com/students.htm>

### **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 optimal viewing of the content and functions of your online course. Always ensure that you are using the most update version for the browser you choose to access the online learning content.

**NOTE: Mozilla Firefox** is the recommended browser for Blackboard. (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 interactive web 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/>)

### **Netiquette Guide**

"Netiquette" is network etiquette, the do's and don'ts of online communication. Netiquette covers both 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 the University 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 all other 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](http://www.uttyler.edu/tobacco-free).

### **Important Covid-19 Information for Classrooms and Laboratories**

Students are required to wear face masks covering their nose and mouth, and follow social distancing guidelines, at all times in public settings (including classrooms and laboratories), as specified by [Procedures for Fall 2020 Return to Normal Operations](#). The UT Tyler community of Patriots views adoption of these practices consistent with its [Honor Code](#) and a sign of good citizenship and respectful care of fellow classmates, faculty, and staff.

Students who are feeling ill or experiencing symptoms such as sneezing, coughing, or a higher than normal temperature will be excused from class and should stay at home and may join the class remotely. Students who have difficulty adhering to the Covid-19 safety policies for health reasons are also encouraged to join the class remotely. Students needing additional

accommodations may contact the Office of Student Accessibility and Resources at University Center 3150, or call (903) 566-7079 or email [saroffice@uttyler.edu](mailto:saroffice@uttyler.edu).

### **Recording of Class Sessions**

Class sessions may be recorded by the instructor for use by students enrolled in this course. Recordings that contain personally identifiable information or other information subject to FERPA shall not be shared with individuals not enrolled in this course unless appropriate consent is obtained from all relevant students. Class recordings are reserved only for the use of students enrolled in the course and only for educational purposes. Course recordings should not be shared outside of the course in any form without express permission.



## ***TENTATIVE SCHEDULE***

January 16 Course Introduction; Syllabus

Prep for Next Week: *Lecture 1: Measurement & Evaluation Overview*  
**HW Assignment #1: Due January 23**

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January 23 *Lecture 1 (Cont.)*; Hands-on practice in SPSS  
**Quiz #1**;

Prep for Next Week: *Lecture 2: Measures of Central Tendency and Variability*  
**HW Assignment #2: Due January 30**

***JANUARY 29 - LAST DAY TO WITHDRAW FROM COURSE WITHOUT PENALTY (12<sup>th</sup> CLASS DAY)***

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January 30 *Lecture 2: Using Standard Scores*; Hands-on with standard scores  
**Quiz #2**;

Prep for Next Week: *Lecture 3: Correlation and Prediction*  
**HW Assignment #3: Due February 6**

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February 6 *Lecture 3 (Cont.)*; In-class calculation of correlation and prediction  
**Quiz #3**;

Prep for Next Week: *Lecture 4: Inferential Statistics*  
**HW Assignment #4: Due February 13**

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February 13 *Lecture 4 (Cont.)*; In-class SPSS practice of Inferential Statistics  
Inferential Statistics review and practice; **Quiz #4**

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February 20 Midterm Review

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February 27 **Midterm Exam**

Prep for Next Week: *Lecture: Test Characteristics, Administration, and Interpretation* (Group Project Information); **PAR-Q and Questionnaire due March 5 in class**

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March 5      Topic/Data Collection selection and preparation

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March 12     SPRING BREAK

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March 19     Data Collection Preparation

***March 25 - LAST DAY TO WITHDRAW FROM COURSE WITH AUTOMATIC "W"***

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March 26     ***Class Data Collection Day 1***

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April 2      ***Class Data Collection Day 2***

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April 9      Presentation Preparation

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April 16     Presentation Preparation

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April 23     ***Group 1 Presentation*** – MANDATORY ATTENDANCE

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April 30     ***Group 2 Presentation*** – MANDATORY ATTENDANCE