

**University of North Texas**  
**College of Education**  
**Department of Kinesiology, Health Promotion, and Recreation**  
**KINE 4050**  
**Quantitative Analysis in Kinesiology**

**Catalog Description:** A study of measurement theory, instruments used to collect data and procedures for data analysis specific to exercise and sports. The use of computers for data analysis is included. (Not in this section) Prerequisite(s): MATH 1100 and CECS 1100 or the equivalent, or consent of instructor.

**Please see the instructor immediately if you have not completed the prerequisites for this course.**

**Professor:** Dr. Tao Zhang

- Class times: T & TH, 2:00 - 3:20 PM
- Classroom: Gate 132
- Office: PEB 210B; (940) 565-3415 or (940) 565-2651 (Main Office)
- Outlook e-mail: Tao.Zhang@unt.edu
- Office Hours: T & TH, 3:30-5:00 PM, all other times by appointment only

**TA:** Alan Chu, Bahnsen Gym #157, (940) 565-3436, Alan.Chu@unt.edu

**Required Text:** Morrow, J.R., Jr., Mood, D. P., Disch, J. G., & Kang, M. (2016) *Measurement and Evaluation in Human Performance*, (5<sup>th</sup> ed.) Champaign, IL: Human Kinetics.

**Required on the Web:** <http://learn.unt.edu>. All materials for the course are on Blackboard Learn.

**Supplementary Materials:**

1. Additional Readings & Handouts available in Blackboard Learn
2. Video Clips available in Blackboard Learn or supplemental online student resource (access code from the textbook).

**Course Objectives:**

The objective of the course is to introduce the student to the measurement and evaluation concepts used in Physical Education and Exercise Science. These concepts include measurement techniques, reliability, validity, objectivity, and statistics, as well as measurement of the cognitive, affective, and psychomotor domain.

**Course Description:**

Quantitative Analysis is a course designed to teach students the importance of proper measurement and evaluation procedures in the collection, analysis, and evaluation of data. The course will involve the areas of reliability, validity, and objectivity; test construction and analysis; use of statistics and statistical concepts; measures of the cognitive, affective and psychomotor domain; and hypothesis testing. We will not be using computer applications in this

section of the course. We will work statistical problems by hand to help your understanding of the particular statistic that we are using at the time. I will be glad to work problems and answer questions. I see the role of the instructor as a “**facilitator**” to your learning. You, as students have the ultimate responsibility for learning. I am here to guide and assist you. I love teaching Quantitative Analysis. It is a difficult course and requires much study time. I do not believe that you can just come to class and expect to pass the class. It will take study time outside of class. The course is about measurement concepts. It is not a mathematics class. It does involve some statistical calculation which involve some basic algebra. You should have taken a statistics course or a mathematics course by this time, so statistics should not be a problem for you. Statistics is just a tool used to make a decision. My door is always open to you. An appointment would be nice, but not essential during office hours.

### **Grading Procedures**

- Three Written Exams will be given during the course. Each exam has a value of 100 points.
- Thirteen chapter quizzes will be given. Each quiz has a value of 10 points. If we don't complete 13 quizzes, the total number of points needed in the course will be reduced by the number of points that are not given on quizzes.
- The total points for the course is 430 points.
- Grades for the course will be awarded according to the following:

<b>Points</b>	<b>Grade</b>
<b>344 – 430</b>	<b>A</b>
<b>280 – 343</b>	<b>B</b>
<b>215 – 279</b>	<b>C</b>
<b>150 – 214</b>	<b>D</b>
<b>149 –below</b>	<b>F</b>

**These grades are based on an average score of 65% on exams with a standard deviation of 15%. On written exams, 80% of the number of questions on the exam will be an A and the corresponding grades are as follows:**

<b>80%</b>	<b>A</b>
<b>65%</b>	<b>B</b>
<b>50%</b>	<b>C</b>
<b>35%</b>	<b>D</b>

**If the total of your three exam grades is 210 and your quiz total is 90, your total point value is 300. The total of 300 is between 280 and 343, so your course grade is a B.**

**Written Exams:** The three exams will be taken on a scantron. I will provide the scantrons. It is your responsibility to have a pencil, eraser, and calculator for the exam. You will not be allowed to borrow either. You may not use your phone as a calculator. Some questions may be short answer or fill in the blank which you will do in the test booklet.

**Make-up exams:** PLEASE DO NOT MISS AN EXAMINATION. Make-up exams are a rare exception given only under extreme circumstances or university excused absences. Should a make-up exam be necessary, the professor may opt to give the exam during final exam week immediately following the course final exam. In the rare case of an approved make-up exam, long essay questions, short answer and/or oral examination could also be the test form utilized by the professor. Make-up exams due to emergencies are dealt with on an individual basis. If you

are going to need to miss an exam as due to a University excused absence, please inform me before you miss the exam. If you will be missing class for a University excused absence, please provide me with a list of dates that you will be absent at the beginning of the semester.

**Quizzes:** We will have a total of 13 chapter quizzes. The questions may be multiple choice or true/false, or problems which will be answered on scantron. I suggest that you bring a calculator to class each day as you will not be able to borrow one or use the calculator on your phone on exams or quizzes. Some questions may be short answer or fill in the blank which will be answered in the test booklet. **You will not be able to make up missed quizzes unless the absences are university excused.**

<b>Tentative Class Schedule</b>		
<b>Week</b>	<b>Topic</b>	<b>Reading</b>
<b>One</b>	<b>Class Requirements; Concepts in Measurements</b>	<b>CH : 1</b>
<b>Two</b>	<b>Using Technology in Measurements Descriptive Stat / Normal Dist.</b>	<b>CH : 2, 3</b>
<b>Three</b>	<b>Descriptive Stat / Normal Dist.</b>	<b>CH : 3</b>
<b>Four</b>	<b>Correlation / Prediction</b>	<b>CH : 4</b>
<b>Five</b>	<b>Correlation / Prediction Exam # 1</b>	<b>CH : 4</b>
<b>Six</b>	<b>Inferential Statistics</b>	<b>CH : 5</b>
<b>Seven</b>	<b>Inferential Statistics Norm-ref Reliability /Validity</b>	<b>CH : 5, 6</b>
<b>Eight</b>	<b>Criterion ref Reliability / Validity</b>	<b>CH : 7</b>
<b>Nine</b>	<b>Criterion ref Reliability / Validity Exam # 2</b>	<b>CH : 7</b>
<b>Ten</b>	<b>Developing Written Tests</b>	<b>CH : 8</b>
<b>Eleven</b>	<b>Phy Fit / Act in Adults and Youth</b>	<b>CH : 9, 10</b>
<b>Twelve</b>	<b>Assessment of Sport Skills</b>	<b>CH : 11</b>
<b>Thirteen</b>	<b>Psychological Measurements</b>	<b>CH : 12</b>
<b>Fourteen</b>	<b>Classroom Grading</b>	<b>CH : 13</b>
<b>Fifteen</b>	<b>Performance-Based Assessment Exam # 3</b>	<b>CH: 14</b>

## **Attendance:**

Attendance will be taken at the BEGINNING of the class hour and/or at other times during the class. If you are absent when attendance is taken, you ARE ABSENT. Even if you were in class a few minutes later (or earlier), you will be counted absent if you are not present when attendance is taken. If you need to arrive at a specific class later than normal or leave earlier than normal, please let the instructor know. Arriving late or leaving early is NOT to be a general practice. If this is your practice, you will simply be counted absent. We need you in class to participate and engage in class activities. It is impossible for the instructor to differentiate between “excused and unexcused” absences. Thus, an absence is an absence. To be fair to all, the instructor does NOT DIFFERENTIATE AMONG ANY TYPE OF ABSENCES. If you are absent on military orders please provide a copy of your orders to the Instructor PRIOR to your leaving. If you are traveling on University of North Texas business, you MUST complete the required form from the Office of the Dean of Students to not have the absence count against you. This form MUST be turned in within 2 class periods of your return to class. Otherwise, you will be counted absent. Any student missing more than FOUR CLASSES FOR ANY REASON will receive a grade of F in this course.

All students are expected to arrive on time, have reviewed the class Internet site, have read material PRIOR to coming to class, and be prepared to participate in class activities. Students are NOT to read the newspaper, conduct other work, sleep, or otherwise be non-participating in class. Such student actions are unprofessional and disrespectful to fellow classmates and to the instructor. Such actions disturb your classmates and/or the professor. Students who behave in any of these inappropriate manners will be asked to leave the classroom and will be counted absent for that period. Do NOT simply stop coming to class without taking formal steps to drop the course. The instructor will drop you “passing” (WP) until the point in the semester where this is no longer possible. Students who simply stop coming to class and do not go through the formal drop procedure will be assigned a grade of “F” at the end of the semester.

## **American with Disabilities Compliance:**

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of Disability Accommodation website at <http://www.unt.edu/oda>. You may also contact them by phone at 940.565.4323.

## **Family Educational Rights and Privacy Act (FERPA Information):**

Students have the right to expect their grades will be kept confidential. There are a few things, because of the size and/or nature of the class, the instructor must advise you of regarding collection and distribution of test results, quiz scores, assignments, projects, etc. During this class it may be necessary for you to pass your assignments forward to the instructor or it may be necessary for the instructor to call your name and then return your completed assignment to you by passing it across the room. The instructor, under the reasonable assumption guidelines, assumes students are collecting ONLY their own materials. Every attempt will be made to keep your information confidential. Neither your course grades nor grades for any assignment will be posted in a way that could result in your being identified by other students or faculty members.

### **Academic Dishonesty:**

Cheating will not be tolerated in this class. You are not to receive information from another student or give information to another student during an exam or quiz. You are to use only your memory. Students caught cheating during an exam will be charged under the University's Code of Student Conduct. Among other punishments, students found guilty run the risk of having their score changed to a zero, receiving a grade of F for the course, and/or dismissal from the University. Academic dishonesty includes cheating, plagiarism, fabrication, and facilitating academic dishonesty. Cheating refers to collaborating on assignments that are not meant to be group work, and using unauthorized materials. Plagiarism refers to presenting ideas, words, or statements of another person without giving credit to that person.

### **Acceptable Student Behavior:**

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at [www.unt.edu/csrr](http://www.unt.edu/csrr).

### **SPOT (Student Perceptions of Teaching):**

The Student Perceptions of Teaching (SPOT) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SPOT to be an important part of your participation in this class. Completion of the SPOT evaluation will add 10 points to your final grade. To receive credit for the SPOT evaluation, please complete the evaluation and submit a screen print of your receipt to the appropriate place on blackboard. DO NOT email a copy of your SPOT receipt to me. You will not get credit.

## **Email etiquette**

### **Use of Email**

The only email address to be used for the class is your official UNT email address. Please check it frequently. I will use Blackboard for announcements and email for emergencies.

1. Keep emails to a minimum! Ask general questions in class.
2. Do NOT attempt to contact the instructor through Blackboard Learn. I do not check that account. Use your UNT email account. The instructor's e-mail address is [tao.zhang@unt.edu](mailto:tao.zhang@unt.edu) and that is the communication avenue you should use.
3. It is recommended that you put "KINE 4050 [and whatever else is appropriate]" in the subject line of your e-mail communication so that the instructor is aware that this is communication about KINE 4050. Please make sure that your name is on the email somewhere.
4. Do not include your UNT-ID number (or Social security number) in any emails!  
No questions about grades and/or specifics about exam questions will be answered by email.

**THE TIME TO BE CONCERNED WITH YOUR GRADE IS NOW AND NOT  
AT THE END OF THE SEMESTER!**

**We Will Have a Wonderful Learning Experience! Enjoy Our Class!!**

KINE 4050, Spring 2018  
Student Information Sheet

(Please Print)

Name: \_\_\_\_\_

Phone:(\_\_\_\_)\_\_\_\_\_

Student ID: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Year in School: \_\_\_\_\_

Major: \_\_\_\_\_

Minor: \_\_\_\_\_

This certifies that I have read the syllabus and understand the requirements for this course, including the Policy on Cheating and Plagiarism. I agree to abide by academic honesty. As such, I verify that all work done in this class will be my own. I understand that violating the policy will result in an automatic "F" for the course and referral to the Dean of Students for disciplinary proceedings.

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Date: \_\_\_\_\_