



Measurements and Techniques in Exercise Science (KIN 5371)

Department of Kinesiology, College of Health Sciences,
The University of Texas at El Paso

Spring 2020



INSTRUCTOR: Sudip Bajpeyi, PhD
CLASS TIME: Monday 3:30 PM – 6:20PM MST (Online)
OFFICE HOURS: Email to make an appointment
 Sudip Bajpeyi, PhD; (HSSN 445); 915-747-5461;
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COURSE DESCRIPTION: In this course students will learn to use equipment relevant to measurement and understanding of exercise physiology. Alongside learning laboratory techniques to collect data, students will also learn how to develop research proposals, analyze and interpret scientific data relevant to the area of exercise physiology.

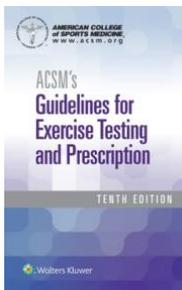
COURSE OBJECTIVE:

1. Learn various research methods relevant to measurements of metabolic health and physiological response to exercise.
2. Learn and demonstrate scientific data collection and data analyses*
3. Learn and demonstrate scientific literature review, developing research questions, answering those questions by analyzing collected data and meaningful data interpretations

***Due to online format of this course this semester, this will be done on an online format**

COURSE TEXT

ACSM's Guideline for Exercise Testing & Prescription, 10th ed.; Handouts, journal articles



EVALUATION OF STUDENTS

Assessment/Quizzes	25%
Research Project	70%
Module 1 (15%)	
Module 2 (25%)	
Module 3 (30%)	
Research abstract	5%

GRADING SCALE*

A = 90-100%
B = 80-90%
C = 70-80%
D = 60-70%
F = below 60%

RUBRICS AND GRADING CRITERIA

Assessment/Quizzes (25% of grade):

You will be evaluated throughout the semester on the materials presented in the form of reading assignment, lectures, videos and resources shared with you on blackboard. Each student **MUST** complete each assignment before the deadline. All study materials and assignment will be posted ahead of time. Students are strongly recommended to complete the assessment at least a day ahead of deadline to accommodate any unforeseen challenges with internet, technology etc. Students will not be allowed to make-up a missed assessment without **prior** arrangement made in case of emergency.

Research Project (70% of grade):

After determining the primary research focus (*example: insulin sensitivity, maximal aerobic capacity, physical activity level, body composition etc.*), each group will work together to review relevant literature, develop research question(s), analyze data and present the study outcomes. This will be completed in three modules.

Students must upload the presentation and relevant articles using the link on blackboard. PowerPoint Presentations are due before class time.

Relevant articles are due midnight before the scheduled presentation.

Please name the pdf copy of the articles in following format:

Author last name_year of publication_title of the article

(you may need to abbreviate the article title as blackboard may not allow long file name)

****Some of the basic segments below do not have specific points assigned. However, inability to include those section will result in losing overall points.**

Presentation Module 1 (15% of grade):

1. Primary research questions you intend to answer (1 slide) (1%)
2. Introduction, relevant terminology, definitions etc. related to your research topic (5%)
3. Literature Review: Present at least 6 original research articles directly aligned to your research questions in following format. (6%)
 - a. Title, author information, purpose of the study (1 slide)
 - b. Methods used (1 slide)
 - c. Clearly present the relevant data from the article (figures and tables must be interpreted accurately)
 - d. Conclusion of the study
4. Overall summary/conclusion(s) from the articles you have presented (1 slide) (2%)
5. Revised research question(s) based on the literature review (if any)
6. Clear plan for module 2 (example: based on the literature you presented how will you revise your research question (if you decide to revise)? What literature will you search to answer those questions? etc.) (1%)
7. Feedback and Discussion – This may lead to additional research questions/literature review

Presentation Module 2 (25% of grade):

1. Revised research questions developed from Module 1 (1 slide)
2. Summarize relevant literature that were presented in module 1 (1 slide)

3. Discuss additional literature (at least 6 original research articles) to solidify the research questions (figures and tables directly relevant to research questions). Your literature review, at this point, should clearly indicate your in-depth understanding in the topic you have chosen and the gap in literature that you are planning to answer in module 3. (10%)
4. Any final modification to the research questions based on literature review in module 2.
5. Methods: You are expected to demonstrate ***in-depth*** understanding on the research methods you have chosen for your project and demonstrate your in-depth understanding about the principle(s) of each method(s), detailed protocol of the methods, strength and limitations of the methods, and critical thinking related to method(s) and technique(s) used in your articles of interest. (10%)
6. Data analyses plan – How the data will be analyzed to answer the specific questions (specifics on statistics, data presentations etc.) (3%)
7. Expected outcome results based on the literature review (hypotheses) (2%)

Presentation Module 3 (30% of grade):

1. Background Literature (***briefly summarize*** your findings from previous presentations and include any additional data that may be relevant to complete your literature review) (3%)
2. Research Questions (1 slide)
3. Methods
 - a. summarize methods
 - b. Data analyses/statistics
4. Results – Present the relevant data in a format that is appropriate for a ***peer reviewed research article*** (tables and figures). (15%)
 - a. Study design and specific statistics used for analyzing data
 - b. Descriptive statistics in a table
 - c. Relevant Figures directly aligned to answering research questions asked
5. Discussions – discuss the findings and evaluate how these results relate to the objectives as well as present body of scientific literature. You will be evaluated for your critical thinking in interpretation of data. You should discuss possible sources of error, and conclusions derived from the data. (10%)
6. Summary/Conclusion (2%)

Research Abstract (5% of grade):

Based on the research project outcome results, students will write an abstract following ACSM National abstract writing guidelines (200 characters not including spaces). Look up guidelines for abstract submission on <https://www.acsm.org>

COURSE REQUIREMENT AND POLICIES:

ADDITIONAL COURSE INFORMATION

This course focuses on methods, techniques, and procedures for health evaluation and the instrumentation used in these tests. The level of presentation of this course necessitates a current understanding of the physiological concepts presented in other courses. You are expected to have a basic understanding of exercise physiology and to have reviewed outside material to enhance your comprehension of these concepts. For each hour spent in class, expect to spend **a minimum of three hours** reading and reviewing your course materials.

- Students are required to **check the Blackboard site and emails for the course on a daily basis** for announcements and assignments.
- Students are required to check their emails daily. Student must use their UTEP email ID, put their full name, course name and be professional over email. Emails without these information will not be acknowledged.
- Take all quizzes at designated times. There will be no make-up quizzes. For the following documented circumstances, please contact your Professor: 1) illness/ hospitalization; 2) death of family member; 3) official university business; 4) legal matter.
- Review of grades and any discrepancies/mistakes in grades can be done within a week from the grade posted. After the one-week period, assignments cannot be reviewed.
- **Electronic Devices:** If you are using cell phones, computers, &/or other electronic devices for purposes that are not directly related to meeting the learning objectives of this course, then it will be considered as disruptive behavior. Personal calls, texts, &/or emails should be completed outside of class time.
- The course material posted are subject to the copyright law of the United States (Title 17 U.S. Code) and is for the use of students in KIN 3325 only. Further reproduction or distribution is prohibited.
- There will be reasonable flexibility with online learning environment. However, students are expected to be sitting or standing upright during class – as opposed to lying down. Lying down would not be acceptable in a face-to-face classroom. Additionally, your cameras are expected to be turned on so that we may maximize our engagement with each other; Having your camera on will be considered to be a component of active participation. Mute your microphone when you are not contributing to the discussion in the virtual classroom to avoid being unnecessarily disruptive. If you must “leave” briefly (eg, to go to the toilet), then please use the relevant online symbol to indicate to me that you have “stepped out” or send me a private message in the Chat box.
- **Late or Missed Assignments and Assessments Policy:** There will be no make-up quiz/exam for missed deadlines unless it is for an excused reason (eg, documented medical emergency). Assignments submitted after deadline will result in ZERO credit.
- Students are expected to be familiar with and adhere to the UTEP Handbook of Operating Procedures.

Failure to follow any of these rules may result deduction of points and/or in disciplinary action, including an instructor-initiated drop from the course.

TECHNOLOGY REQUIREMENTS

Course content is delivered via the Internet through the Blackboard learning management system (LMS). Ensure your UTEP e-mail account is working and that you have access to the Web. You may use any of the primary Web browsers—Explorer, Google Chrome, Firefox, Safari, etc. When having technical difficulties, try switching to another browser.

You will need to have or have access to a functional computer/laptop. Check that your computer hardware and software are up-to-date and able to access all parts of the course. **If you encounter technical difficulties of any kind, contact the [Help Desk](#).**

NETIQUETTE

- Always consider audience. Remember that members of the class and the instructor will be reading any postings.
- Respect and courtesy must be provided to classmates and to instructor at all times. No harassment or inappropriate postings will be tolerated.
- When reacting to someone else's message, address the ideas, not the person. Post only what anyone would comfortably state in a Face to face situation.
- A course brings together a group of diverse individuals with various backgrounds. Students are influenced and shaped by such factors as ethnicity, gender, sex, physical abilities, religious and political beliefs, national origins, and sexual orientations, among others. We expect to learn from each other in an atmosphere of positive engagement and mutual respect. Students are responsible for treating others with courtesy and respect and should promote group cohesion in an effort to create a safe learning environment.
- Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space. If students wish to do so, they have the ethical obligation to first request the permission of the writer(s).

EXCUSED ABSENCES AND/OR COURSE DROP POLICY

According to UTEP Curriculum and Classroom Policies, "When, in the judgment of the instructor, a student has been absent to such a degree as to impair his or her status relative to credit for the course, the instructor may drop the student from the class with a grade of "W" before the course drop deadline and with a grade of "F" after the course drop deadline." See academic regulations in the UTEP Undergraduate Catalog for a list of excuse absences. Therefore, if I find that, due to non-performance in the course, you are at risk of failing, I may decide to drop you from the course. I will provide 24 hours advance notice via email.

ACCOMODATION POLICY

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the [UTEP Center for Accommodations and Support Services](#). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at cass@utep.edu, or apply for accommodations online via the [CASS portal](#).

BLACKBOARD SESSIONS

This class requires that you are available to meet virtually (with a webcam and microphone) during the scheduled class time. Although most of the course will be delivered online, there will be virtual sessions when students are expected to attend the sessions. Although meeting schedule will be posted on blackboard ahead of time to help students plan their semester, please note that these schedule may change and you are expected to be available during the scheduled class time throughout the semester. The purpose of these sessions are for you to view live demonstrations of the course material, having an opportunity to ask questions, and engage in discussions with your classmates. These exercises are intended to help you with learning. Therefore, you are expected to attend all scheduled class sessions.

Recording of blackboard session by students are not allowed in any format (using phone or screen captures) and posting any blackboard material anywhere is prohibited. All sessions will be recorded by the Professor and posted on blackboard when appropriate.

TITLE IX STATEMENT

The University of Texas at El Paso is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in any federally funded educational programs or activities. Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination including sexual misconduct, sexual harassment, and acts of sexual violence. Sexual violence may include rape, sexual assault, sexual battery, sexual coercion, stalking, and relationship violence. Title IX prohibits institutions from excluding, separating, denying benefits, or otherwise treating individuals differently on the basis of sex. Sex based discrimination is prohibited at UTEP both by law and by University and UT System policies.

DEADLINES, LATE WORK, AND ABSENCE POLICY

Deadlines for all the assignment will be posted on blackboard. All study materials and assessment will be posted ahead of time. Students are strongly recommended to complete the assessment at least a day ahead of deadline to accommodate any unforeseen challenges with internet, technology etc. Students will not be allowed to make-up a missed assessment without **prior** arrangement made in case of emergency

Make-up work will be given *only* in the case of a *documented* emergency. Note that make-up work may be in a different format than the original work, may require more intensive preparation, and may be graded with penalty points. If you miss an assignment and the reason is not considered excusable, you will receive a zero. It is therefore important to reach out to me—in advance if at all possible—and explain with proper documentation why you missed a given course requirement. Once a deadline has been established for make-up work, no further extensions or exceptions will be granted.

COVID-19 ACCOMODATIONS

Students are not permitted on campus when they have a positive COVID-19 test, exposure or symptoms. If you are not permitted on campus, you should contact me as soon as possible so we can arrange necessary and appropriate accommodations.

SCHOLASTIC INTEGRITY

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as one's own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the [Office of Student Conduct and Conflict Resolution \(OSCCR\)](#) for possible disciplinary action. To learn more please visit [HOOP: Student Conduct and Discipline](#).

CLASS RECORDINGS

The use of recordings will enable you to have access to class lectures, group discussions, and so on in the event you miss a synchronous or in-person class meeting due to illness or other extenuating circumstance. Our use of such technology is governed by the Federal Educational Rights and Privacy Act (FERPA) and UTEP's acceptable-use policy. A recording of class sessions will be kept and stored by UTEP, in accordance with FERPA and UTEP policies. Your instructor will not share the recordings of your class activities outside of course participants, which include your fellow students, teaching assistants, or graduate assistants, and any guest faculty or community-based learning partners with whom we may engage during a class session. **You may not share recordings outside of this course.** Doing so may result in disciplinary action.

TEST PROCTORING SOFTWARE

Some assessments may make use of Respondus Lock Down Browser and Respondus Monitor inside of Blackboard to promote academic integrity. It will be communicated with students ahead of time which assessment may use these test protecting software. You are encouraged to learn more about how to use these programs prior to the first test.

COPYRIGHT STATEMENT FOR COURSE MATERIALS

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

COVID-19 PRECAUTIONS

You must STAY AT HOME and REPORT if you (1) have been diagnosed with COVID-19, (2) are experiencing COVID-19 symptoms, or (3) have had recent contact with a person who has received a positive coronavirus test. Reports should be made at screening.utep.edu. If you know of anyone who should report any of these three criteria, you should encourage them to report. If the individual cannot report, you can report on their behalf by sending an email to COVIDaction@utep.edu.

For each day that you attend campus—for any reason—you must complete the questions on the UTEP screening website (screening.utep.edu) prior to arriving on campus. The website will verify if you are permitted to come to campus. Under no circumstances should anyone come to class when feeling ill or exhibiting any of the known COVID-19 symptoms. If you are

feeling unwell, please let me know as soon as possible, and alternative instruction will be provided. Students are advised to minimize the number of encounters with others to avoid infection.

Wear face coverings when in common areas of campus or when others are present. You must wear a face covering over your nose and mouth at all times in this class. If you choose not to wear a face covering, you may not enter the classroom. If you remove your face covering, you will be asked to put it on or leave the classroom. Students who refuse to wear a face covering and follow preventive COVID-19 guidelines will be dismissed from the class and will be subject to disciplinary action according to Section 1.2.3 *Health and Safety* and Section 1.2.2.5 *Disruptions* in the UTEP Handbook of Operating Procedures.

COURSE RESOURCES: Where you can go for assistance

UTEP provides a variety of student services and support:

Technology Resources

- [Help Desk](#): Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

Academic Resources

- [UTEP Library](#): Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- [University Writing Center \(UWC\)](#): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- [RefWorks](#): A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide

Individual Resources

- [Military Student Success Center](#): Assists personnel in any branch of service to reach their educational goals.
- [Center for Accommodations and Support Services](#): Assists students with ADA-related accommodations for coursework, housing, and internships.
- [Counseling and Psychological Services](#): Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.