

The University of Texas of the Permian Basin
Syllabus for KINE 6361.001.2172
Exercise Physiology Laboratory Methods
Spring Semester, 2017

Course Description

We be learning to use lab equipment and perform tests in the Kinesiology Lab.

Course Location

Mesa Building 1109

Course Time

1:00 pm – 2:20 pm MW

Instructor: Dave Morris, Ph.D.
Office: MB 3152
Phone: 432-552-2332
Email: morris_da@utpb.edu
Office Hours: MW 5:30-7 pm
TR 3-4 pm

Course Objectives:

- Learn how to operate laboratory equipment
- Learn how to administer specific tests used in exercise physiology

Course Texts:

None required

Prerequisites:

Graduate Standing

Course Requirements and Assignments:

1. Students are expected to attend all classes.
2. We will be meeting on 29 occasions to learn how to use various laboratory instruments and perform specific procedures with those instruments. Ten (10) points will be possible for each meeting and students will be graded on their performance with the equipment and performance on the procedures. Make-up opportunities will be available for valid excuses.

Topics, Grading, and Evaluation:

Body Comp (BodPod)	20 pts
Body Comp (Dexa)	20 pts
Metabolic Cart Use	20 pts
Resting Metabolism	10 pts
Ergometry	20 pts
General Exercise Testing	10 pts
Progressive Exercise Tests to Exhaustion	10 pts
Time Trial Testing	10 pts
Wingate Testing	10 pts
Pulse Oximetry	10 pts
NIRS	10 pts
Blood/Tissue Oxygenation	10 pts
Phlebotomy	20 pts
Blood Lactate	10 pts
Istat and Blood Gases	10 pts
Hematocrit	10 pts
Blood Handling	10 pts
Blood Osmolarity	10 pts
Urine Osmolarity	10 pts
Body Temperature	10 pts
Blood Pressure Vascular Stiffness	10 pts
Environmental Physiology	30 pts
Total	290 pts

Grading Scale:

90 – 100%	= A
80 - 89%	= B
70 – 79%	= C
60 – 69%	= D
59% and Below	= F

Please ~~note~~ that I **do not** give “extra credit” or “bonus points”. You are here to learn the material that is being presented. If you are in a position where you need extra credit or bonus points to receive a satisfactory grade, then you have not done a very good job of learning the material and your grade will reflect this performance.

Tentative Schedule:

1/17: Welcome, Syllabus, Introductions

1/19: Body Composition (BodPod)

1/24: BodPod Evaluation
1/26: Body Density/Composition (Dexa)
1/31: Dexa Evaluation
2/2: Operation of Metabolic Cart
2/7: Metabolic Cart Evaluation
2/9: Measuring Resting Metabolic Criteria
2/14: Ergometry (Velotron, Lode Ergometers)
2/16: Evaluation of Velotron, Lode Ergometers
2/21: General Exercise Testing
2/23: Performance of Progressive Exercise Tests to Exhaustion
2/28: Performance of Time Trial Performance Tests
3/2: Wingate Testing
3/7: Blood Oxygen Measurements (Pulse Oximetry)
3/9: Blood and Tissue Oxygen Measurements (NIRS system)
3/14: Spring Break
3/16: Spring Break
3/21: NIRS Evaluation and Integrating Blood and Tissue Oxygenation with Exercise
3/23: Phlebotomy
3/28: Phlebotomy Evaluation
3/30: Blood Lactate Analyses during Rest and Exercise
3/31: Use of the Abbott Istat Blood Gas Analyzer
4/4: Istat Evaluation and Measurement of Acid-Base Parameters during Rest and Exercise
4/6: Measurement of Hematocrit Levels
4/11: Blood Handling for Plasma Measures
4/13: Measurement of Plasma Osmolarity
4/18: Measurement of Urine Osmolarity
4/20: Measurement of Body Temperature (Core, Skin)
4/25: Blood Pressure and Vascular Stiffness (Sphygmocor)
4/27: Environmental Physiology (Heat)
5/2: Environmental Physiology (Hypoxia)
5/4: Environmental Physiology (Hyperoxia)
Academic Honesty:

At UTPB, students and faculty are responsible for maintaining an environment that encourages academic integrity. Students and faculty members are required to report an observed or suspected case of academic dishonesty immediately to the faculty member in charge of an examination, classroom, or laboratory research projects, or other academic exercise.

Since the value of an academic degree depends on the absolute integrity of the work done by the student pursuing the degree, it is imperative that a student maintain a high standard of individual honor in scholastic work. Scholastic dishonesty includes, but is not limited to, cheating, plagiarism, and collusion.

“Cheating” includes:

Copying from the paper of another student, engaging in written, oral, or any other means of communication with another student, or giving aid to, or seeking aid from, another student when not permitted by the instructor.

Using material during an examination or when completing an assignment that is not authorized by the person giving the examination or making the work assignment.

Taking or attempting to take an examination for another student, or allowing another student to take an examination for oneself.

Using, obtaining, or attempting to obtain, by any means, the whole or any part of an unadministered examination or work assignment.

Taking photos or making copies of exams.

“Plagiarism” includes the unacknowledged incorporation of the work of another person in work that a student offers for credit.

“Collusion” includes the unauthorized collaboration with another person in preparing written work that a student offers for credit.

Grade Appeal Process:

A student who wishes to contest a grade given by an instructor must initiate the procedure by contacting the instructor who assigned the grade. The instructor and the student should informally review the criteria for assignment of grades and the student’s performance. The instructor may affirm the grade or revise the grade. If the student is not satisfied after the informal discussion with the instructor, then the student may initiate a formal grade appeal by completing an Academic Appeal Form which may be obtained from the Office of Behavioral Sciences (432-552-2325). Normal grade appeals should be filed at the earliest date possible, but no later than six months from the final date of assignment. The instructor and the student should complete the appropriate parts of the

form, clearly indicating the instructor's rationale for the grade given and the student's basis for the grade appeal.

At each administrative level of the appeal process, an attempt will be made to resolve the issue. If the instructor holds one of the administrative positions used in the appeal process, then that level is omitted. If no resolution is reached at a particular level, then the appeal is forwarded with the recommendation of the administrator at that level, with all documentation.

If the appeal is to be considered by the Vice President for Academic Affairs, then a copy of the Academic Appeal Form shall be forwarded by the student's Academic Dean.

The Office of the President is the final step in the appeal process at The University of Texas of the Permian Basin.

ADA Policy:

Any student who believes that he or she may require assistance for any type of physical or learning disability should consult with me as soon as possible. To request academic accommodations for a disability, contact Leticia Madrid, Director of the PASS Office in Mesa Building 1160, 432-552-2631, or madrid_l@utpb.edu. Students are required to provide documentation of disability to the PASS Office prior to receiving accommodations.

The definition of a disability for the purposes of ADA is that she or he (1) has a physical or mental impairment that substantively limits a major life activity, (2) has a record of such an impairment or, (3) is regarded as having such an impairment.

Students who have provided all documentation and are eligible for services will be advised of their rights regarding academic accommodations and responsibilities. The University is not obligated to pay for diagnosis or evaluations nor is it obligated to pay for personal services or auxiliary needs.

If you need accommodations because of a disability, if you have emergency medical information to share with the instructor, or if you need special arrangements in the case the building must be evacuated, please inform the instructor immediately. It is best to contact the instructor after class or during office hours.

Cell Phones

Please turn off all cell phones prior to entering lecture. Any student whose cell phone causes continued disruption of lecture will be asked to leave.

Do not bring your cell phone to exams! Any student caught with their cell phone in view during an exam will receive a 0 for that exam!

All information is subject to change.

Sample Syllabus