Physiology of Exercise Lab

Course Description

This is the required laboratory course with KINE 4312. Demonstration and hands-on learning will introduce students to the scientific basis, techniques, and methods used in exercise physiology. Lab activities will compliment lecture materials from KINE 4312.

Learning Objectives

- Demonstrate knowledge of the structure and function of the body as it relates to physical activity.
- Understand and be able to apply the basic concepts and terminology associated with exercise physiology.
- Demonstrate knowledge of the integrative nature of the physiological systems under the stress of exercise.
- State representative values of the various body systems at rest, submaximal exercise, and maximal exertion.
- Identify functional changes in response to a session of exercise.
- Identify laboratory procedures with respect to exercise physiology.
- Identify the scientific body of knowledge in exercise physiology.

Major Course Requirements

The methods of evaluation and the criteria for grade assignment are:

A. Requirements and point values.
   1. Seven Labs -60%
      a. Muscular Strength & Endurance
      b. Muscular Power
      c. Flexibility/Functional Movements
      d. Blood Pressure & Heart Rate
      e. Aerobic (Field vs. Laboratory)
      f. Body Composition
      g. Supplemental Equations and Dietary Intake
   2. Two Lab Reports- 30%
      a. Midterm (Labs 1-3)
      b. Final (Labs 4-7)
   3. Quizzes- 10%

*Points values may be altered to reflect the needs of the course.
* Each Lab Assignment consist of 30 points. If there is an unexcused absence during the collection of data, the available points will automatically drop to 15 points. Further absences will result in a zero for that current lab. Labs are IN CLASS assignments. Thus, you will not receive credit unless approved by the instructor.
Furthermore, each lab will be completed in TWO weeks.

Lab reports consist of you the student:
• collecting physically derived data,
• putting it into a data bank along with other classmates,
• analyzing it statistically,
• interpreting the data,
• answering questions and presenting rationale for findings based on scientific or otherwise authoritative resources
• completion of all lab reports in a college-level writing style

Labs turned in late will be handled completely at the discretion of your instructor.

Here's the deal on your labs. Regardless of what you have been doing in your other classes, you will be required to utilize the full extent of your education to produce your lab reports. Half-done labs, obviously hurried labs designed to feign some kind of completion, and labs that blatantly did not follow instructions will be given a grade equivalent to the effort associated with its completion. It’s both done and done well, or it will be met with significant reductions or worse. "A" and "B" grades will only be given to truly excellent labs. Average and just meeting all basic requirements will receive a "C" at best. Please review Lab Report Rubric for further details and requirements when submitting Lab Reports.

B. Grading Scale:
   90-100% = A  
   80-89%  = B  
   70-79%  = C  
   60-69%  = D  
   59% and below = F

NOTE REGARDING YOUR GRADES: At the end of the semester, I will not even consider rounding up your grade or passing you on a close grade unless you have done the following: a) seen me (in person) for help on a regular basis, b) completed all point opportunities, c) accumulated no unexcused absences and d) bothered to ask questions/participate regularly in class.

Course Schedule and Policies

Note: Please see attached Schedule Outline at end of Syllabus, may be altered throughout semester!

Required or Recommended Readings

Textbook: N/A

Recommended or Supplemental Reading: N/A

Website: N/A

List of Supplies: N/A

State Adopted Proficiencies/TExES competencies (COE)

State Adopted Proficiencies for Teachers and/or Administrators/Counselors

A. LEARNER-CENTERED KNOWLEDGE: The teacher possesses and draws on a rich knowledge base of content, pedagogy, and technology to provide relevant and meaningful learning experiences for all
B. LEARNER-CENTERED INSTRUCTION: To create a learner-centered community, the teacher collaboratively identifies needs; and plans, implements, and assesses instruction using technology and other resources.

C. EQUITY IN EXCELLENCE FOR ALL LEARNERS: The teacher responds appropriately to diverse groups of learners.

D. LEARNER-CENTERED COMMUNICATION: While acting as an advocate for all students and the school, the teacher demonstrates effective professional and interpersonal communication skills.

E. LEARNER-CENTERED PROFESSIONAL DEVELOPMENT: The teacher, as a reflective practitioner dedicated to all students’ success, demonstrates a commitment to learn, to improve the profession, and to maintain ethics and personal integrity.

**TExES Competencies**

A. TExES COMPETENCIES

  Competency 002 - Physical education teacher applies principles and concepts of fitness and fitness development/maintenance to evaluate, select, and adapt activities that help learners achieve and maintain appropriate fitness levels.

  Competency 003 - The teacher appreciates human diversity, recognizes how diversity in the classroom and the community may affect learning and creating a classroom environment in which both the diversity of groups and the uniqueness of individuals are recognized and celebrated.

  Competency 004 - Fitness-related health, nutrition, and safety. The physical education teacher knows health, nutrition, and safety principles and practices related to fitness/performance and encourages learners to apply these principles and practices.

  Competency 011 - Legal, ethical, medical, and safety issues. The physical education teacher understands legal, ethical, medical, and safety issues relating to physical education programs and applies this understanding in a variety of contexts

B. NATIONAL COMPETENCIES & PROFICIENCIES FOR ATHLETIC TRAINING (CAATE 4th Ed.)

Risk Management Proficiencies Taught

- RM-P1: Instruct the patient how to properly perform fitness tests to assess his or her physical status and readiness for physical activity. Interpret the results of these tests according to requirements established by appropriate governing agencies and/or a physician. These tests should assess:
  - RM-P1.4: Muscular Endurance

**Course Policies**

*Attendance/tardiness*

**Attendance in class is MANDATORY.** Since each student contributes to the data to be distributed for analysis, it is considered vital that you contribute. Failure to contribute to the data pool will result in your assignment being given a zero by your acting instructor.

Quizzes/Attendance Quizzes will be provided throughout the semester at the discretion of the instructor. These may be daily or randomized. It will be up to you as the student to ensure your presence for each of your scheduled classes and for the duration of the entire lab to ensure you meet the requirements for these assignments. Those that choose not to without a university excused absence or prior notification and acceptance from the instructor will be given a zero.
Furthermore, should you choose to come to lab, but not participate as necessary, it will be considered the same as an absence. Please, only attend your registered lab section. Do not attend other labs without your instructor's permission.

The highest level of professional dignity is expected while participating in the laboratory setting. The equipment in the lab is VERY EXPENSIVE and was not designed for any other purpose than its proper use. Please don't use it as a place to lean, sit, store stuff, or mess around. Please conduct yourself accordingly.

Cell phones may be used during class appropriately during data collection periods. The instructor will ask for respect while introducing topics/data collection protocols which will include storage of all cellphones during this time. Those that choose not to follow these guidelines will be asked to confiscate their phones or leave the laboratory.

While most people know smoking is not allowed in class, too many haven’t figured out that smokeless tobacco is not allowed either, as per university policies. No smokeless tobacco in lab. While not currently addressed by university policy, I do not allow the use of electronic cigarettes in class, even if they only emit water vapor.

Any liquids in the lab must be kept in the classroom portion of the class (in the projector and screen area). These liquids must also be contained in a sealable container. Food will not be allowed in any area of the lab, at any time.

**Late work and Make-up Exams**

NOTE REGARDING QUALITY OF YOUR WORK: If any work done on behalf of this class is not performed at a standard expected of a junior or senior in college, it either will not be graded or it will be severely penalized. You can avoid this problem by simply doing a quality job the first time. I do realize that this is a 1 credit course, but it is also a 4000-level course. You should be showing your best work at this point.

NOTE REGARDING SUBMISSION OF YOUR ASSIGNMENTS: All work in this class is to be submitted as an attached word document unless otherwise specified. It is your burden to work with the instructor during the first assignment to get your format correct and then use it consistently throughout the semester. Assignments will not be accepted through email, unless specifically asked by your instructor.

When turning in your assignment, you will be given at most two (2) opportunities to turn in your FINALIZED copy to our class blackboard link. The second submission will then be graded. If you have exhausted your two chances or have not turned in your assignment before the link has expired, your assignment will not be accepted, thus resulting in a zero for the assignment.

**Extra Credit**

Extra credit opportunities may be given at the discretion of the instructor throughout the semester.

**Cell Phone/Electronic Device Usage**

Please turn off your cell phones during class unless you are using it for a legitimate lab function such as using it for research assistance, as a calculator, timer, or metronome. Any violation of this policy will be
considered disruption and will be reported.

**Academic Integrity/Plagiarism.**

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in one or more of the following:

1. Written reprimand.
2. Requirement to re-do work in question.
3. Requirement to submit additional work.
4. Lowering of grade on work in question;
5. Assigning grade of 'F' to work in question;
6. Assigning grade of 'F' for course;
7. Recommendation for more severe punishment, such as dismissal from the program or from the University.

*Please see the University Catalog for more information.*

**Dropping a Class**

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. *Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course.* Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. (November 8th, 2019) is the last day to drop a class with an automatic grade of “W” this term.

**Preferred methods of scholarly citations**

APA 6th edition

**Classroom/professional behavior**

Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

**Statement of Civility**

Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You
are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

**Grade Appeals***

As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Dean’s office in the college in which the course is taught or the Office of the Provost.

**Disabilities Accommodations***

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

**Statement of Academic Continuity**

In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

*Required by SACS or HB2504

**Syllabus**

*(course outline – May change due to class requirements. PLEASE BE FLEXIBLE)*

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<tbody>
<tr>
<td><strong>LAB</strong></td>
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<td><em>Labor Day 09/02</em></td>
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*Required by SACS or HB2504*
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<th></th>
<th>Start Date</th>
<th>End Date</th>
<th>Due Date</th>
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<td>09/10-09/17</td>
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<td>9/12-09/19</td>
<td>Due: 09/30</td>
<td>Due: 09/24</td>
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<td>09/24-10/1</td>
<td>9/25-10/02</td>
<td>09/26-10/03</td>
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<td>10/22-10/29</td>
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<td>09/26-10/03</td>
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<td>11/5-11/12</td>
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<td>11/7-11/14</td>
<td>Due 11/25</td>
<td>Due: 11/19</td>
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<td>11/25-12/2</td>
<td>11/19-11/26 or 12/3 (turkey-day)</td>
<td>11/20</td>
<td>11/21</td>
<td>Due by scheduled final</td>
<td>Due by scheduled final</td>
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