I. Course Description: This course examines the human physiological response to exercise and the physiological basis of movement. A lab fee of $30.00 will be charged to each student. “Physiology of Exercise Lab” (1 credit) meets once each week in 75-minute segments for 15 weeks. Students have significant weekly reading assignments, are expected to take regular reading quizzes, and are required to analyze lab results and prepare lab reports each week. These activities average at a minimum 2 hours of work each week to adequately prepare outside of classroom hours.

II. Intended Learning Outcomes/Goals/Objectives (Program/Student Learning Outcomes):
This course links with SFA Initiative #4: Develop a learner-centered environment.
This course links with SFA’s COE Goal and Initiative #2: Prepare educators and industry professionals. This course links with SFA Initiative #5: Create new learning opportunities through additional interdisciplinary, international, service learning, and civic engagement experiences.
This course links with SFA’s COE Goal and Initiative #2: Prepare educators and industry professionals.

Program Learning Outcomes:
1. The student will identify and analyze critical components of physical movements
2. The student will demonstrate an understanding of basic principles of physical fitness concepts and the utilization of available technology in assessing fitness levels, performance, and physiological effects during various levels of physical stress.
3. The student will apply knowledge of principles and stages of motor development.
4. The student will demonstrate knowledge of Kinesiological principles and content

Student Learning Outcomes:
- Student will demonstrate understanding of the biochemical cost of using and producing energy (ATP) with respect to rest and various intensities of exercise and metabolic adaptations to various forms of training. (PLO 3)
- Student will be able to explain the physiology and function of muscle, adaptations to various forms of training and practical field tests to evaluate individual status. (PLO 1&2)
- Student will be able to identify major components of cardiorespiratory system (i.e. heart) and explain its adaptations to various forms of training and practical field tests to evaluate individual status. (PLO 4)
- Student will be able to explain how body composition is estimated, its relationship to performance and be able to perform practical field tests to evaluate individual’s status and training methods (PLO 2)

III. Labs: Cognitive evaluation will consist of 13 laboratory assignments and 11 quizzes (120 pts total). Some labs will require physical activity; you will have to dress appropriately (i.e. sneakers and athletic clothing). All students are expected to participate. Labs will be due at the start of class.

IV. Quizzes: At the start of class, 1-5 question quizzes will given over the lab that will be done that day. Approximately 5 minutes will be given to complete the quiz. Students are expected to have read the information about the lab prior to the quiz. If a student comes in late, they will earn a 0 for the quiz that day.

Make Up Labs/Quizzes – If missing a lab, prior arrangements must be made in critical cases. If a student is absent on lab day, he/she will be earn a zero. You may not turn in a lab you were not present for.

V. Evaluation & Assessments: Each lab is worth a total of 5pts, while each quiz will be worth 5pts. The 13 lab assignments and 11 quizzes will combine to form 120 total points. An average of your scores will then be calculated from the 120 available points. Participation is REQUIRED and is part of your grade per week. Failure to be an active participant may cause a student to lose points.
VI. Grades: Total points =120
Labs: 13 Labs worth 5 points each = 65 Points
Quizzes: 11 Quizzes worth 5 points each = 55 points
A= 120-108
B= 107-96
C= 95-84
D= 83-72
F= 71-0

VII. Tentative Course Outline

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/26</td>
<td>NO LAB</td>
</tr>
<tr>
<td>2</td>
<td>9/2</td>
<td>Syllabus/Lab#1: Conversions Quiz #1</td>
</tr>
<tr>
<td>3</td>
<td>9/9</td>
<td>Lab #2: MSC Strength/ Endurance Quiz #2</td>
</tr>
<tr>
<td>4</td>
<td>9/16</td>
<td>Lab #3: Wingate Quiz #3</td>
</tr>
<tr>
<td>5</td>
<td>9/23</td>
<td>Lab #4&amp;5: RER/EPOC Quiz #4</td>
</tr>
<tr>
<td>6</td>
<td>9/30</td>
<td>Lab #6: RMR Quiz #5</td>
</tr>
<tr>
<td>7</td>
<td>10/7</td>
<td>Lab #7: Heart Rate Response Quiz #6</td>
</tr>
<tr>
<td>8</td>
<td>10/14</td>
<td>Lab #8: Heart Dissection Quiz #7</td>
</tr>
<tr>
<td>9</td>
<td>10/21</td>
<td>Lab #9 &amp; 10: VO2 Max / Lactate Quiz: 8</td>
</tr>
<tr>
<td>10</td>
<td>10/28</td>
<td>Lab #11: Blood Pressure Quiz #9</td>
</tr>
<tr>
<td>11</td>
<td>11/4</td>
<td>Lab 12: ECG Quiz #10</td>
</tr>
<tr>
<td>12</td>
<td>11/11</td>
<td>Lab #13: Body Comp Quiz #11 LAST LAB</td>
</tr>
</tbody>
</table>

VIII. Cell Phones and Laptops: The use of cell phones and Laptops for anything other than taking notes or calculating formulas is strictly prohibited and may cause a student to lose points.

**WEEKLY LAB OBJECTIVES**

1. To introduce course, cover syllabus. To discuss units of measure. To introduce abstract writing.
2. To gain experience administering MSC strength assessments. To estimate 1RM.
3. To examine the individual fuel utilization during each stage of the Bruce protocol. To observe and discuss the process of excess post-exercise oxygen consumption.
4. To observe and evaluate the absolute and relative responses of oxygen consumption (VO2) during 2 graded exercise tests. To compare the results of these exercise tests with each other.
5. To assess and evaluate anaerobic power of the subject.
6. To evaluate the HR response during and in recovery from exercise. To practice the palpation of resting, exercise, and recovery HR.
To practice taking blood pressure readings. To discuss methods and terminology.

To perform several different body composition tests. To discuss the differences between each test. To learn to properly measure height and weight.

Review previous lab assignments, Q&A session

To discuss blood flow through the heart. To examine anatomical aspects of the heart. To discuss cardiovascular terminology.

To perform an exercising electrocardiogram. To discuss ECG methods and terminology.

IX. Readings: Students will be required to read the lab prior to class, however no text is required, but it is strongly recommended to bring your lecture textbook. All labs are to be turned in on Lab Sheets; they will NOT be accepted on notebook paper. All labs will be available to print off of D2L prior to meeting.

X. Course Evaluations:
“Near the conclusion of each semester, students in the College of Education electronically evaluate courses taken within the COE. Evaluation data is used for a variety of important purposes including: 1. Course and program improvement, planning, and accreditation; 2. Instruction evaluation purposes; and 3. Making decisions on faculty tenure, promotion, pay, and retention. As you evaluate this course, please be thoughtful, thorough, and accurate in completing the evaluation. Please know that the COE faculty is committed to excellence in teaching and continued improvement. Therefore, your response is critical! In the College of Education, the course evaluation process has been simplified and is completed electronically through MySFA. Although the instructor will be able to view the names of students who complete the survey, all ratings and comments are confidential and anonymous, and will not be available to the instructor until after final grades are posted.

XI. Student Ethics and Other Policy Information:

Attendance Policy 6.7 - Attendance and participation are required and expected. As this course is designed to apply physiological theories to real world scenarios, your presence in class is essential to your understanding of these processes. University travel and legal obligations will be the only excused absences allowed (written documentation required). There is no make up for missed labs. Arriving late to class and early departure is unacceptable. However, in certain cases students may be able to attend a different lab section for the week with the prior approval of both lab instructors. No exceptions will be made for any of the above policies.

Students with Disabilities Policy 6.1 & 6.6 - To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 326, 468-3004/468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations.

For additional information, go to http://www.sfasu.edu/disabilityservices/.

Academic Integrity Policy 4.1 - Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one’s own work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one’s paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Withheld Grades Semester Grades Policy 5.5
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If
students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Acceptable Student Behavior Policy 10.4
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

Additional Information:

Code of Ethics for the Texas Educator:

The Texas educator shall comply with standard practices and ethical conduct toward students, professional colleagues, school officials, parents, and members of the community and shall safeguard academic freedom. The Texas educator, in maintaining the dignity of the profession, shall respect and obey the law, demonstrate personal integrity, and exemplify honesty and good moral character. The Texas educator, in exemplifying ethical relations with colleagues, shall extend just and equitable treatment to all members of the profession. The Texas educator, in accepting a position of public trust, shall measure success by the progress of each student toward realization of his or her potential as an effective citizen. The Texas educator, in fulfilling responsibilities in the community, shall cooperate with parents and others to improve the public schools of the community. This chapter shall apply to educators and candidates for certification.


To complete Certification/Licensing Requirements in Texas related to public education and other professional settings, you will be required to:

1. Candidates must undergo a criminal history background check prior to clinical teaching and prior to employment as an educator. The public school campuses are responsible for completing the criminal background check. A person who is enrolled or planning to enroll in a State Board for Educator Certification-approved educator preparation program or planning to take a certification examination may request a preliminary criminal history evaluation letter regarding the person's potential ineligibility for certification due to a conviction or deferred adjudication for a felony or misdemeanor offense.

A Preliminary Criminal History Evaluation is a non-mandatory, non-binding evaluation of an individual’s self-reported criminal history. In addition, the agency obtains your name-based Texas criminal history information. The service is provided to the requestor for a non-refundable fee. The requestor will receive an evaluation letter by email from agency staff advising of potential ineligibility for educator certification.

You are eligible to request a Preliminary Criminal History Evaluation if:

• You enrolled or planning to enroll in an educator preparation program or
• You are planning to take a certification exam for initial educator certification, and
• You have reason to believe that you may be ineligible for educator certification due to a conviction or deferred adjudication for a felony or misdemeanor offense.

You are not eligible for a preliminary evaluation of your criminal history if you do not have a conviction or deferred adjudication for a felony or misdemeanor offense.

In addition, you must complete the fingerprinting process when you apply for certification. Participation in the evaluation does not preclude you from submitting to a national criminal history review at the time you apply for your educator certification. Your criminal history will be reviewed and you may be subject to an investigation based on that criminal history, including any information you failed to submit for evaluation.

Additional information can be found at https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/.
2. Provide one of the following primary ID documents: passport, driver’s license, state or providence ID cards, a national ID card, or military ID card to take the TEExES exams (additional information available at www.texas.ets.org/registrationBulletin/). YOU must provide legal documentation to be allowed to take these mandated examinations that are related to certification/licensing requirements in Texas. If you do not have legal documentation, you may want to reconsider your major while at SFASU.

3. Successfully complete state mandated a fingerprint background check. If you have a history of criminal activity, you may want to reconsider your major while at SFASU.

   For further information concerning this matter, contact Katie Snyder Martin at 936-468-1740 or snyderke1@sfasu.edu.