I. Course Description:
This course examines the human physiological response to exercise and the physiological basis of movement. Prerequisites: KIN 100 (Physical Fitness Concepts and Activities), KIN 330 (Measurement and Evaluation), and KIN 340 (Foundations of Personal Fitness). Co-requisites: KIN 353L (Physiology of Exercise Lab)

KIN 353 “Physiology of Exercise” (3 credits) meets four times each week in 115-minute segments for 5 weeks, and also meets for a 2-hour final examination. Students have significant weekly reading assignments, take two exams and a final examination, and are required to write a major class paper in which they explain comprehensively the physiological benefits of exercise. These activities average at a minimum 6 hours of work each week to adequately prepare outside of classroom hours.

II. Intended Learning Outcomes/Goals/Objectives (Program/Student Learning Outcomes):

The complete listing of standards associated with the PLO’s, SLOs, assignments, and assessments are located on the PCOE website.

- 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:

- The student will identify and analyze critical components of physical movements
- 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.
- The student will apply knowledge of principles and stages of motor development.
- 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 (ie. heart) and explain it’s 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. Course Assignments, Exams, and Labs:

Cognitive evaluation will consist of four exams (100 pts each).

Make Up Exams – Make up exams will not be given, prior arrangements must be made in critical cases. If a student is absent on exam day he/she will be earn a zero (unless it is a excused absence).
<table>
<thead>
<tr>
<th>Assessment/Assignment</th>
<th>Program StandardsNASPE</th>
<th>CAEP Standards</th>
<th>ISTE Standards</th>
<th>InTASC Standards</th>
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</thead>
<tbody>
<tr>
<td>Exam 1: Metabolism and Fatigue</td>
<td>1.1</td>
<td>1.3</td>
<td>1a</td>
<td>4j, 4k, 4l, 5i, 5j</td>
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<tr>
<td>Exam 2: Muscle Structure and Neuromuscular control</td>
<td>1.1</td>
<td>1.3</td>
<td>1a</td>
<td>4j, 4k, 4l, 5i, 5j</td>
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<tr>
<td>Exam 3: Cardiorespiratory Physiology and Aerobic Exercise Training</td>
<td>1.1</td>
<td>1.3</td>
<td>1a</td>
<td>4j, 4k, 4l, 5i, 5j</td>
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<tr>
<td>Final Exam: Body Composition and Environmental Phys.</td>
<td>1.1</td>
<td>1.3</td>
<td>1a</td>
<td>4j, 4k, 4l, 5i, 5j</td>
</tr>
</tbody>
</table>

IV. Evaluation and Assessment

EXAM I  Chapters 2,5,11  ____/100
EXAM II Chapters 1,3,10  ____/100
EXAM III Chapters 6,7,8  ____/100
FINAL  Chapters 15(14),12,17  ____/100
Total  ____/400

V. Tentative Course Outline/Calendar:

**Week 1: (July 16-18)**
Section 1 - Chapters 2,5,11 Metabolism (Substrate utilization, phosphorylation) Expenditure/Fatigue (rest to exercise transition, recovery, fuel utilization) Adaptations (Impacts on performance)

**Week 2: (July 22-26)**
Section 2 - Chapters 1,3,10 Muscle structure and function, Neuromuscular control (propogation and adaptation), Adaptations (impacts on performance) **Section 1 Exam: Monday July 22**

**Week 3: (July 29-August 1)**
Section 3 - Chapters 6,7,8 Cardiac function (organization, hemodynamics, and circulatory responses) Respiratory system (structure, diffusion of gases and transport of gases) **Section 2 Exam: Monday July 29**

**Week 4: (August 5-8)**
Section 4 - Chapters 15 (14),12,17 Body Composition (weight standards, optimal weight, total body water regulation) Hot and Cold Environments (thermoregulation, maintenance, risks associated), Children and Adolescents (development, physiological responses and adaptations to exercise) **Section 3 Exam: Monday August 5**

**Week 5: (August 12-16)**
Conclude Section 4. **Final Exam: Friday August 16**

Upon your enrollment in this course, **if you do not already have an existing LiveText account**, you should receive an access code for a free LiveText account. LiveText is a data management system that you will use to submit designated assignments in this course. The access code will come to you directly from the LiveText system to your SFA email account. If you do not receive this code by the end of the first week of class, please check your junk email. If you still do not have the message, please contact the SFA LiveText coordinator at livetext@sfasu.edu. Once you have received the access code, it is YOUR responsibility to activate the account. Failure to activate the account and/or submit the required assignment(s) could result in course failure.

**VII. 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.**

**VIII. Student Ethics and Other Policy Information:**

**Attendance:** (Policy 6.7) Attendance and participation are required at all times. University travel and Legal obligations will be the only excused absences allowed (written documentation required). Arriving late to class and early departure is unacceptable. Two such occurrences will result in an absence and the attendance grade will be reduced accordingly. It is the students’ responsibility to inform the instructor when he/she arrives late otherwise that student could counted absent for that day.

**Students with Disabilities (Policy 6.1 and 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 325, 468-3004/4681004 (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/](http://www.sfasu.edu/disabilityservices/).

**Student Academic Dishonesty (Policy 4.1)**
Abiding by university policy on academic integrity is a responsibility of all university faculty and students.

**Definition of Academic Dishonesty**
Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to:
- using or attempting to use unauthorized materials on any class assignment or exam;
- falsifying or inventing of any information, including citations, on an assignment; and/or;
- 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 one’s own. Examples of plagiarism include, but are not limited to:
- submitting an assignment as one’s own work when it is at least partly the work of another person;
- submitting a work that has been purchased or otherwise obtained from the Internet or another source; and/or, - incorporating the words or ideas of an author into one's paper or presentation without giving the author credit.

**Penalties for Academic Dishonesty**
Penalties may include, but are not limited to reprimand, no credit for the assignment or exam, re-submission of the work, make-up exam, failure of the course, or expulsion from the university.

**Student Appeals**
A student who wishes to appeal decisions related to academic dishonesty should follow procedures outlined in Academic Appeals by Students (6.3).
**Withheld Grades Semester Grades (Policy 5.5)**

At the discretion of the instructor of record and with the approval of the academic unit head, 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, except as allowed through policy [i.e., Active Military Service (6.14)]. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

**Student Code of Conduct (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 iCare: Early Alert Program at SFA. Information regarding the iCare program is found at https://www.sfasu.edu/judicial/earlyalert.asp or call the office at 936-468-2703.

**Additional Information:**

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

1. Undergo criminal background checks for field or clinical experiences on public school campuses; the public school campuses are responsible for the criminal background check; YOU are responsible for completing the information form requesting the criminal background check. If you have a history of criminal activity, you may not be allowed to complete field or clinical experiences on public school campuses. At that point, you may want to reconsider your major while at SFASU.

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 TExES exams (additional information available at www.texas.ets.org/registrationBulletin/ <http://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 936-468-1740 or snyderke1@sfasu.edu.