I. COURSE DESCRIPTION

The course is an introduction to the fundamental principles of human physiology and their application to kinesiology. The web-based format will provide both information and some practical application to real life situations.

II. RATIONALE

The course provides students with a foundational knowledge of the human physiology system and its application to human movement. The course content is fundamental to all upper division kinesiology courses.

III. STATE ADOPTED PROFICIENCIES FOR TEACHERS AND/OR ADMINISTRATORS/COUNSELORS

1. 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 students.

2. 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.

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

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

5. 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.

IV. TExES COMPETENCIES & CAATE COMPETENCIES & PROFICIENCIES

a. TExES COMPETENCIES

Domain II - HEALTH-RELATED PHYSICAL FITNESS
Competency 006 - The teacher understands major body systems, principles of
physical fitness development and training, and the benefits of a healthy, active lifestyle.

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

Diagnosis Competencies Taught & Evaluated

DI-C1: Demonstrate knowledge of the systems of the human body.
DI-C5: Describe the principles and concepts of body movement including functional classification of joints, arthrokinematics, normal ranges of joint motion, joint action terminology, and muscle groups responsible for joint actions (prime movers, synergists), skeletal muscle contraction, and kinesthesis/proprioception.

V. COURSE OBJECTIVES AND OUTCOMES

As a result of successfully completing this course, the student will:

1. Understand the mechanical properties of cells and tissues and how cells are compartmentalized and form tissues within the body.

2. Discover how biological energy is acquired, transferred, and used to do biological work, how molecular interactions play a major role in protein function, and how compartmentation of enzymes is essential for organizing and separating metabolic processes.

3. Explain how substances move across cellular membranes in response to gradients and molecular interactions.

4. Understand that functional control systems require efficient communication using a combination of chemical and electrical signals.

5. Know how the endocrine system plays a major role in communication and control of physiological processes via hormonal interactions and pathways.

6. Learn how the nervous system is responsible for maintaining homeostasis and how the divisions of the nervous systems (including the central nervous system, the sensory systems, and efferent division) correlate with the different steps in a reflex pathway.

7. Understand the structure-function relationships and mechanical properties of muscles.

8. Exemplify the importance of the cardiovascular system, blood flow, and the control of blood pressure.

9. Analyze the cellular and protein components of blood and their functions.

10. Understand the mechanics of the respiratory system and how these demonstrate mass flow, homeostatic balance, mass balance, and the law of mass action.

11. Learn that the urinary and renal systems play a vital role in human physiology in terms of absorption, excretion, and filtration.

12. Understand that energy balance and metabolism are dependent upon intake, output, and the glucose that powers the brain.
13. Discover how the digestive system maintains mass balance and homeostasis through the process of secretion, absorption, and movement of nutrients and molecules across membranes.

14. Develop a basic understanding of the endocrine system, its function on growth and metabolism, and how each hormone has stimuli that initiate its secretion and feedback signals that modulate its release.

15. Know that the function of the immune system is based on chemical communication and molecular interactions between receptors, antibodies, and antigens that work together to fight pathogens.

VI. COURSE TOPICS

1. The Human Body: An Orientation
2. Basic Chemistry
3. Cells and Tissues
4. Skin and Body Membranes
5. The Skeletal System
6. The Muscular System
7. The Nervous System
8. Special Senses
9. The Endocrine System
10. Blood
11. The Cardiovascular System
12. The Lymphatic System and Body Defenses
13. The Respiratory System
14. The Digestive System and Body Metabolism
15. The Urinary System
16. The Reproductive System

VII. INSTRUCTIONAL METHODS AND ACTIVITIES

A. Course is completely on-line. All tests, quizzes, assignments, discussions are detailed on the Blackboard calendar, assignment tool and assessment tools.

VIII. EVALUATION AND GRADE ASSIGNMENTS

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

A. Requirements and point values. The total number of assignments is listed, but section 7 is tentative, thus the total points may vary at the end of the semester.

1. Syllabus Assignment 10 points
2. Islander Email Assignment 10 points
3. General Information Assignment 10 points
4. Profile Picture Assignment 10 points
5. Pretest assessment 15 points
6. Chapter Assignments (16 @ 10 pts.) 160 points
7. Chapter Quizzes (16 @ 10 pts.) 160 points
8. Discussion assignments (2-4 @ 15 pts.) 60 points
9. Exams (4 @ 100 pts.) 400 points

Total: 835 points

B. Grading Scale (based on 825, but this could vary depending upon #7 above)
The entire course including assignments, quizzes and exams are available on-line and are available according the course schedule. Students are required to complete all work by the respective deadlines. Excused absences are limited to participation in a TAMUCC-sanctioned event or participation in a religious holy day as outlined in the University catalog. Any assignment, quiz, or test missed due to a TAMUCC-sanctioned event must be completed prior to the absence. Coursework, assignments, and quizzes may not be made up due to tardiness. Consistent attention to assignment instructions and submission deadlines is critical to the successful completion of this course.

**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 plagiarism, cheating on an exam, unauthorized collaboration, illicit possession of examinations or examination materials, or forgery. **Plagiarism** is the presentation of the work of another as one’s own work; **cheating on examinations** involves giving or receiving unauthorized help before, during, or after an examination; **unauthorized collaboration** is the submission for academic credit of an entire work (or part thereof) as one's own effort, when it has been developed in substantial collaboration with another person or source without the professor’s permission.

Disciplinary action for academic misconduct is the responsibility of the faculty member assigned to the course. The faculty member is charged with assessing the gravity of any case of academic dishonesty, and with giving sanction to any student involved. Penalties that may be applied to individual cases of academic dishonesty include 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 university. (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 me before you decide to drop to be sure it is the best thing to do. 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. See the Academic Calendar for the last day to drop a class with an automatic grade of “W” this term.

**Preferred methods of scholarly citations**

**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 (can be in place of classroom/professional behavior)**
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. NOTE: Printing online tests and/or quizzes is strictly prohibited.

**NOTE: Printing online tests and/or quizzes is strictly prohibited.**

**Module 1** (for all Module dates see Blackboard Calendar and Assignments/Assessments)

The Human Body: An Orientation

Basic Chemistry

Cells and Tissues

Skin and Body Membranes
Test I: Chapters 1-4

Module 2
The Skeletal System
The Muscular System
The Nervous System
Special Senses
Test II: Chapters 5-8

Module 3
The Endocrine System
Blood
The Cardiovascular System
The Lymphatic System and Body Defenses
Test III: Chapters 9-12

Module 4
The Respiratory System
The Digestive System and Body Metabolism
The Urinary System
The Reproductive System
Test IV: Chapter 13-16

X. Required or Recommended Readings
(Lists of required/recommended texts and reading)

Website: (required if on-line course)
The Website that accompanies and is coordinated with this course is https://bb9.tamucc.edu/

XI. Bibliography
The knowledge bases that support course content and procedures include:
*The course syllabus provides a general plan for the course; deviations may be necessary.

**KINE 2325 – Physiological Aspects of Kinesiology**

**Syllabus Acknowledgment Form**

I, (print name) ______________________________, certify that I have read and understand the policies that are presented in the syllabus for KINE 2325 - Physiological Aspects of Kinesiology at Texas A&M University - Corpus Christi.

Signature ___________________________________________ Date __________________