Texas A&M University-Corpus Christi  
College of Education  
KINE 2325 - Physiological Aspects of Kinesiology  
Course Syllabus – 2014

Course: **KINE 2325-W02**  
Instructor: Lindsey Jarrett, MS, CSCS  
Class Meeting/Location: **Online**  
Office Hours: **Concerns/Questions will be addressed M-F 8am-5pm via email**  
Semester: **Fall 2014**  
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I. COURSE DESCRIPTION  
An introduction to the fundamental principles of human physiology and their application to Kinesiology.

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. PROGRAM STUDENT LEARNING OUTCOMES  
A. **BS in Athletic Training**  
1. Commission on Accreditation of Athletic Training Education (CAATE)  
   **Competencies:**
   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 kinesthesia/proptioception.
B. BS Kinesiology Exercise Science
1. Knowledge of anatomy and physiology

C. BS Kinesiology Pre-PT/OT
1. Knowledge of Anatomy and Physiology
2. Knowledge of preventive care.

V. TEExES 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.

VI. 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.
14. 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.

VII. 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/Body Defenses
13. The Respiratory System
14. Digestive System /Body Metabolism
15. The Urinary System
16. The Reproductive System

VIII. INSTRUCTIONAL METHODS AND ACTIVITIES
A. Traditional Experiences: readings, discussions, exams.
B. Online Experiences: presentations, written assignments, videos, interactive learning activities, Interactive Anatomy CD-ROM, quizzes, exams.

IX. EVALUATION AND GRADE ASSIGNMENTS
A. COURSE REQUIREMENTS
1. Complete all assigned readings.
2. Complete all weekly assignments and associated learning activities.
3. Complete all quizzes and exams.
4. Complete all written assignments.
5. Demonstrate computer proficiency through the use of Blackboard and the Internet.

**NOTE: Late assignments will not be accepted.** All written work must exhibit a college level competency in spelling, grammar, punctuation, and style. Written work with significant mechanical flaws will not be accepted.

B. EVALUATION
1. Tests 1-4 (100 points each → 400 points) 50%
2. Quizzes 1-16 (15 points each → 240 points) 30%
3. Written Assignments 1-16 (10 points each → 160 points) 20%

Total 100%

C. GRADING SCALE
90-100% A
80-89% B
70-79% C
60-69% D
59% or less F

D. DEFINITION OF GRADES
Grades are distributed according to the following criteria:
F You either fail to do the assignment or your work is too far below acceptable standards to
merit any consideration. You either completely miss the point of the assignment or disregard critical elements of it.

**D** You demonstrate that you understood the assignment, but constructed and presented the material in a less than satisfactory way. Your performance was sub-standard relative to normal expectations.

**C** You complete an assignment that the average student, working the average amount of time should be expected to prepare. Your work is complete but in no way exceptional or deserving of extra attention.

**B** You exceed expectations. Your preparation and delivery serve as examples of the proper concepts and practices. All of the required material is plainly in evidence, and your work is fluid and smooth.

**A** Your work obviously stands out from that of the normal body of students. You serve as a role model for how the assignment should be carried out. You are creative and energetic, expanding the boundaries of the assignment.

**X. COURSE SCHEDULE and POLICIES**

**A. TENTATIVE SCHEDULE**

| January 22- Spring Classes Begin; Intro, Pretest, Syllabus, AS1 and Quiz 1 Open | April 1- AS10, AS11 and Q10, Q11 Due |
| January 29- Intro, Syllabus, Pretest, AS1, Q1 Due | April 8- AS12 and Q12 Due |
| February 4- AS2 and Q2 Due | April 9- Test III (9-12) Due |
| February 11- AS3 and Q3 Due | April 11- Last Day to Drop |
| February 18- AS4 and Q4 Due | April 15- AS13 and Q13 Due |
| February 19- Test I (1-4) Due | April 22- AS14 and Q14 Due |
| February 25- AS5 and Q5 Due | April 29- AS15 and Q15 Due |
| March 4- AS 6, AS7 and Q6, Q7 Due | May 6- AS16 and Q16 Due; Last Day of Classes |
| March 10-14- Spring Break | May 7- Reading Day |
| March 18- AS8 and Q8 Due | May 8- Test IV (13-16) Due |
| March 19- Test II (5-8) Due | May 16- Final Grades Submitted |
| March 25- AS9 and Q9 Due |

**B. COURSE POLICIES**

**1. ATTENDANCE POLICY**

Students are required to punctually attend all class meetings (when applicable) and complete all assignment 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.

2. BLACKBOARD AND COMPUTER REQUIREMENTS
It is your responsibility to obtain the required hardware (computer), software (browser, settings, etc.), and reliable internet connection. If you are having trouble with your personal computer and/or internet connection, you will need to plan to take your assessments on campus or find an alternative computer/connection to use. View the Island Online Technical Requirements to find out what you need to ensure the tools in Blackboard will work properly for you: https://iol.tamucc.edu/techreq.php. If you are experiencing problems with quizzes/tests, please call the TAMUCC Student Computer Help Desk by phone at 361.825.2825 and email your instructor ASAP.

3. STUDENT CONDUCT
Professional behavior is expected of all students. Inappropriate course conduct (cursing, disruption, etc.) may result in a reduced final grade or failure of the course.

4. ACADEMIC HONESTY
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, forgery, or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) 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.

If the faculty member determines that assigning a grade of “F” to the course is the appropriate penalty and this disciplinary action occurs prior to the deadline for dropping courses, the student forfeits his/her right to drop the course in question. The faculty member may file a record of cases of academic dishonesty, including a description of the disciplinary action taken, along with any materials involved, with his or her college dean and the Office of Student Affairs. The office of the academic dean of the college in which the offense took place will maintain records of all cases of academic dishonesty reported for a period of not more than two years. Any student who has been penalized for academic dishonesty has the right to appeal the judgment or the penalty assessed. The Appeals Procedure will be the same as that specified for grade appeals. The grade appeals procedure may be found in the University Rules manual.

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


XII. BIBLIOGRAPHY

*The knowledge bases that support the course content and procedures include:*


XIII. GRADE APPEALS
As stated in University Rule 13.02.99.C2, Student Grade Appeals, 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 Rule 13.02.99.C2, Student Grade Appeals, and 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](http://www.tamucc.edu/provost/university_rules/index.html). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

XIV. 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 Driftwood 101. 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.

**Please turn in your Accommodation Letter within the first two weeks of the semester.**

KINE 2325 - Physiological Aspects of Kinesiology
Syllabus Acknowledgment Form
I, (print name) ____________________________________________, certify by my signature that I have read and understand the class policies that have been presented in the class syllabus for KINE 2325-Physiological Aspects of Kinesiology at Texas A&M University-Corpus Christi.
Signature __________________________ Date _______________
Student ID: __________________________________________

*Copy and paste this form into the “submission box” in your Blackboard Syllabus Assignment. Make sure to fill in the form in its entirety.*