I. COURSE DESCRIPTION
Exercise Testing and Prescription (KINE 4340.001): This course provides classroom and hands-on experience addressing all facets of exercise testing and prescription ranging from health appraisal, physical fitness testing, principles of exercise prescription, clinical exercise prescription, and special populations.

Prerequisites:
1. Prerequisite course required: BIOL 2401 or Prerequisite course required: KINE 2325
2. AND Prerequisite course required: KINE 4312
3. AND Prerequisite course required: KINE 1320 or Prerequisite course required: KINE 2313

II. RATIONALE
This course will provide the student with specialized knowledge pertaining to exercise testing and prescription. The course is designed to in part prepare the student for higher level certification in the area exercise science.

III. 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 students.

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.

IV. TeXeS COMPETENCIES & CAATE COMPETENCIES & PROFICIENCIES
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

NATIONAL COMPETENCIES & PROFICIENCIES FOR ATHLETIC TRAINING (CAATE 5th Ed.)

Diagnosis Competencies Taught & Evaluated:
DI-C3: Describe the physiological and psychological effects of physical activity and their impact on performance.

Psychosocial Competencies Taught & Evaluated:
PS-C2: Explain the stress-response model and the psychological and emotional responses to trauma and forced inactivity.

PS-C3: Describe the motivational techniques that the athletic trainer must use during injury rehabilitation and reconditioning.

PS-C4: Describe the basic principles of mental preparation, relaxation, visualization, and desensitization techniques.

PS-C5: Describe the basic principles of general personality traits, associated trait anxiety, locus of control, and patient and social environment interactions.

PS-C6: Explain the importance of providing health care information to patients, parents/guardians, and others regarding the psychological and emotional well being of the patient.

PS-C9: Explain the basic principles of counseling (discussion, active listening, and resolution) and the various strategies that certified athletic trainers may employ to avoid and resolve conflicts among superiors, peers, and subordinates.

PS-C12: Describe the basic signs and symptoms of mental disorders (psychoses), emotional disorders (neuroses, depression), or personal/social conflict (family problems, academic or emotional stress, personal assault or abuse, sexual assault, sexual harassment), the contemporary personal, school, and community health service agencies, such as community-based psychological and social support services that treat these conditions and the appropriate referral procedures for accessing these health service agencies.

Nutrition Competencies Taught & Evaluated:
NU-C14: Describe disordered eating and eating disorders (i.e., signs, symptoms, physical and psychological consequences, referral systems).

V. COURSE OBJECTIVES/LEARNING OUTCOMES
Given lectures, discussions, videos and/or field experiences, the student will be able to:

A. Demonstrate knowledge of the structure and function of the body as it relates to physical activity.

B. Demonstrate proficiency in testing different systems in the body, both performance and health oriented.
C. State representative values of the various body systems at rest, sub-maximal exercise, and maximal exertion.

D. Identify proper functional changes, as they occur, in response to a session of exercise.

E. Identify laboratory procedures with respect to exercise testing and prescription.

F. Identify the scientific body of knowledge in exercise physiology.

E. To know basic and advanced premises as well as manipulation of exercise prescription for both healthy and special populations

VI. COURSE TOPICS
The major topics to be considered are:

A. concepts and physical risk factors of diseases, and physical activity;

B. risk factor identification and screening; risk stratification;

C. assessment of basic and advanced fitness-related characteristics;

D. basic and advanced exercise prescription;

E. metabolic formulas to determine oxygen consumption and caloric expenditure for multiple modes of exercise;

F. prescription and assessment for clinical populations

VI. INSTRUCTIONAL METHODS AND ACTIVITIES

A. Traditional lecture via power point, classroom discussion, independent learning, and online instruction/readings.

B. Classroom participation activities

C. Because a good portion of the class is skill based, there is also plenty of self-learning and reading required


VII. EVALUATION AND GRADE ASSIGNMENT

A. Course assessments and contributions toward final grade:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (6 total)</td>
<td>35%</td>
</tr>
<tr>
<td>Assignments</td>
<td>30%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>Skills Exam</td>
<td>20%</td>
</tr>
</tbody>
</table>

Exams (35%): Six (6) exams including the final will be given. The final exam is mandatory (i.e., not optional). The final and four (4) additional exams (top scores by percentage of total possible points on the exam) will be weighted equally towards the final grade exam percentage.
**Assignments (30%)**: Throughout the semester you will be asked to complete various assignments. These include performance of health and exercise testing, evaluation of client results, and delivery of suggestions for an exercise programs. Further details for each assignment will be provided on Blackboard. At the end of the semester, you will submit a course notebook that includes all the assignments you submitted during the semester.

- **Case Studies**: Students will be provided with essential readings regarding exercisers in special classifications. Students will work independently to answer questions posed by the instructor. Questions and answers will be provided to the instructor in document form. Students will be responsible for this information for examination purposes.

- **Fitness Evaluations**: A series of fitness evaluation assignments will be conducted on yourself, another person in class, or a volunteer. You will test a subject in the requested areas of fitness with one or more tests. You will interpret the tests and write a proper prescription based on results.

**Quizzes (15%)**: Weekly online quizzes are given via Blackboard. The weekly quizzes will cover material from the readings up to the week they are given and may include previously assigned material (including course readings and lecture material, supplemental material and exercise terminology). It would be in your best interest to stay current with readings and lectures. Quizzes will be available on Sunday morning until the Monday of the following week at 11PM. Quizzes may also be given in class periodically throughout the semester (at the professor’s discretion) to assess student’s understanding of material covered in the lecture and assigned course readings. Students arriving to the lecture after a quiz has been passed out will not be permitted to take the quiz and will receive a score of zero for that quiz (i.e., be on time).

**Skills Exam (20%)**: There will be an assessment of your skills/proficiency for the performance of a cross-section of tests performed during the class. Skills to be assessed will include: blood pressure, 7 site body composition site identification (verbal and physical) and caliper technique, muscular strength and endurance testing, and cycle ergometer submaximal testing technique.

**B. Grading Scale:**

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

**Nota Bene**: Your evaluations in this course will draw on not only information presented in this course, but also the sum total of your kinesiology-based education. Do not expect a specific regurgitation of information on your exams. I will present the more difficult areas, but you are in charge of absorbing (learning) the related information.
VII. COURSE POLICIES AND SCHEDULE

A) E-mail Policy:
I encourage you to contact me via email if you have questions or concerns about the class. However, the following guideline should be used when emailing me:

1) Proper capitalization, spelling, punctuation, and grammar should be used in the text of the message. You must also sign your message and include the name of the class you are contacting me about. I reserve the right to ignore messages that don’t adhere to these guidelines.

2) Emails sent after 1800 (6PM) on a weekday or over the weekend will usually not be answered until the next working day. One week prior to exams (including weekends) this time will be extended until 2200 (10PM).

B) ASSESSMENT AND EVALUATION OF CONCEPTS AND SKILLS
Grades are based on performance, not effort or need. You will earn your grade; I do not give them out and you don’t get a passing grade just for showing up.

C) POLICY ON MISSED ASSIGNMENTS, QUIZZES, AND EXAMS:
If you know in advance that you will miss class, please contact me to arrange for an alternate time and possibly form/version of missed assignment, quiz, or exam. The chance to ‘make-up’ missed assignments, quizzes, and tests absences will be limited to participation in a TAMUCC sanctioned event or participation in a religious holy day as outlined in the University catalog on the day the assignment, quiz or test is due. Any assignment, quiz, or test missed due to a TAMUCC sanctioned event or religious holy day must be verified prior to the due date of the assignment, quiz, or test to be missed. No other excuses will be considered without verification of circumstances by the Dean of Students.

D) 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. I will not give partial credit for a partially completed assignment, a sloppy assignment, an assignment that was obviously completed in a big hurry to beat a deadline, or because you didn’t read the instructions. You will simply receive a zero. These assignments will not be allowed to be made up once the grade is assigned. You can avoid this problem by simply doing a quality job the first time.

E) NOTE REGARDING SUBMISSION OF YOUR ASSIGNMENTS:
All work in this class is to be submitted as an attached word document (.doc or .docx) or PDF (.pdf) 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.

Students can receive an automatic “F” under any of the following conditions:

1. Student does NOT turn in a Course Notebook.

2. The student is found guilty of academic misconduct. Examples of such conduct are cheating, plagiarism or other breaches of academic integrity, such as fabrication, facilitating or aiding academic dishonesty, theft of instructional materials or tests, theft of laboratory equipment, alteration of grades or files, and forgery.
### Topics to Be Covered (dates and topics subject to change):

<table>
<thead>
<tr>
<th>DATES</th>
<th>TOPIC</th>
<th>READINGS (Bk = Book; M = Manual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 27-Sept 10</td>
<td>Course Syllabus &amp; Overview Physical Activity, Health, and Chronic Disease</td>
<td>Syllabus Bk Chapter 1</td>
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<tr>
<td></td>
<td>Principles of Assessment, Prescription, and Exercise Adherence</td>
<td>Bk Chapter 2</td>
</tr>
<tr>
<td></td>
<td>Principles of Assessment, Prescription, and Exercise Adherence</td>
<td>Bk Chapter 3</td>
</tr>
<tr>
<td>Sept 15</td>
<td>EXAM 1</td>
<td>Chapters 1-3</td>
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<tr>
<td>Sept 17-Oct 1</td>
<td>Assessing Cardiorespiratory Fitness</td>
<td>Bk Chapter 4</td>
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<td></td>
<td>Designing Cardiorespiratory Exercise Programs</td>
<td>Bk Chapter 5</td>
</tr>
<tr>
<td>Oct 6</td>
<td>EXAM 2</td>
<td>Chapters 4-5</td>
</tr>
<tr>
<td>Oct 8–Oct 20</td>
<td>Assessing Muscular Fitness</td>
<td>Bk Chapter 6</td>
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<td></td>
<td>Designing Resistance Training Programs</td>
<td>Bk Chapter 7</td>
</tr>
<tr>
<td>Oct 22</td>
<td>EXAM 3</td>
<td>Chapters 6-7</td>
</tr>
<tr>
<td>Oct 27–Nov 10</td>
<td>Assessing Body Composition</td>
<td>Bk Chapter 8</td>
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<tr>
<td></td>
<td>Designing Weight Management &amp; Body Composition Programs</td>
<td>Bk Chapter 9</td>
</tr>
<tr>
<td>Nov 10</td>
<td>EXAM 4</td>
<td>Chapters 8-9</td>
</tr>
<tr>
<td>Nov 12–Nov 17</td>
<td>Assessing Flexibility</td>
<td>Bk Chapter 10-11</td>
</tr>
<tr>
<td></td>
<td>Assessing Balance</td>
<td>Bk Chapter 12</td>
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<tr>
<td>Nov 19</td>
<td>Skills Assessments</td>
<td></td>
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<tr>
<td>Nov 24</td>
<td>EXAM 5</td>
<td>Chapters 10-12</td>
</tr>
<tr>
<td>Nov 25-27</td>
<td>THANKSGIVING BREAK (No Class)</td>
<td></td>
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<tr>
<td>Dec 1</td>
<td>Skills Assessments</td>
<td></td>
</tr>
<tr>
<td>Dec 5</td>
<td>FINAL EXAM (Comprehensive)</td>
<td>Chapters 1-12</td>
</tr>
</tbody>
</table>
VIII. TEXTBOOKS AND REQUIRED MATERIALS


Calculator. A basic calculator with trigonometric functions will be necessary for the numerous calculations required by the homework and laboratory assignments, as well as the tests. NOTE: Cell phones, smart phones, Iphones, Ipads, etc. may not to be used during exams or other testing situations as a calculator.

Due to the urgency of providing the latest information in this changing area, I DO NOT recommend using any previous versions of these texts.

VII. BIBLIOGRAPHY


VIII. 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. For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

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:

A. Written reprimand;

B. Requirement to re-do work in question;

C. Requirement to submit additional work;

D. Lowering of grade on work in question;

E. Assigning grade of “F” to work in question;

F. Assigning grade of “F” for course;

G. 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 (See XII above).

**What is also considered dishonest with reference to this class?**

A. using an assignment from a previous semester, no matter where it came from, to produce your own (my electronic checker will catch this)

B. file swapping with a partner to produce your work, loaning your work to another person to "model" as the borrower may take more than you think putting you both in trouble

C. failure to properly cite resources in your lab report or assignments

D. using any form of outside help other than your mind on any test or quiz, calculators without Internet or note-taking capabilities might be allowed at the professor’s discretion.

E. unethically obtaining copies of exams etc.

F. photographing or copying ANY quiz or test materials for any purpose with ANY device

G. anything else that falls under the umbrella of dishonest conduct that common sense would dictate as unethical

**IX. DISABILITIES AND ACCOMMODATIONS**

*Americans with Disabilities Act (ADA)* - The 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 disability. 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.