I. Course Description:

Exercise Physiology of Sports Performance, KINE 5312.001: This course expands basic undergraduate physiology principles and focuses on the role of exercise physiology in sports performance, applied and research settings.

Prerequisite: undergraduate exercise physiology or like approved course

II. Rationale:

This course will provide the student with specialized knowledge pertaining to sports performance and exercise physiology. The course is designed to in part prepare the student reading, interpreting, and applying exercise physiology in the sport and performance settings.

III. Course Objectives:

This course is designed to enable students to:

1. Familiarize graduate students with research and advanced information in the various areas of exercise physiology
2. Read and interpret research and apply where possible.

3. Explore research topics of their own preference.

4. Students will describe and provide a detailed analysis of physiological effects of exercise on the various systems of the body.

5. Students will experience various methods of testing physiological status relative to exercise.

6. Students will understand the influence of external factors on work potential.

7. Students will apply principles of physiology to the training and conditioning of athletes.

8. Students will apply principles of work physiology to the optimization of health.

9. Students will examine current research in exercise physiology, relative to both basic and applied ramifications.

IV. **Evaluation and Grade Assignment:**

1. Two exams (non-cumulative)

2. 3-4 Research Article Presentations (requires preparation prior to class).

3. Research Paper

4. Other assignments at instructor’s discretion

5. Final grades will be based on the total accumulation of points.

6. Point totals will evolve as the course progresses.

**Grading Scale:**

Total Points - 90% A, 89 - 80% B, 79 - 70% C, 69 - 60% D, 59 - 0.0% F

**NOTE REGARDING YOUR GRADES:** At the end of the semester, I will not even consider rounding up your grade or passing you on a close grade unless you have done the following: a) seen me (in person) for help on a regular basis, b) completed all point opportunities, and c) bothered asking questions regularly in class, d) significantly participated in group discussion.
V. Class Policies:

1. Lack of attendance, for any reason, will hurt your grade. Graduate students are expected to be in class each class period!

2. There is no extra credit for this graduate course.

3. Tests will be taken on the designated or arranged test dates and times only, no last-minute reschedules. Any arrangements must be made by you personally either in writing, in person, or by phone. Late tests will not be allowed unless prior arrangements are made.

4. If you miss an exam, or fail to turn in a paper or report or any other requested item on time, your grade for that item will be recorded as a zero, no partial credit. Assignments will be due on the assigned date. For electronically submitted items, be sure to plan well in advance of the due-date/time. If something is due on a date you have other important stuff happening, turn it in early. Most assignment links are open on day 1 of the class and will remain open until their due dates.

5. Academic dishonesty in any form (electronic, written or any other way not listed here, but present in the student hand-book) will not be tolerated. No notes or “other resources” are allowed on any class evaluations. A zero will automatically be assigned to the test, quiz, or project in question for violations of this policy. See your student handbook for other possible actions regarding academic dishonesty. Trust me, I will bust you to the fullest extent. Count on it.

6. PLEASE TURN YOUR CELL PHONES OR PAGERS OFF OR PUT THEM ON SILENT unless you have a pending emergency. Please tell me if this is the case. IF YOU TEXT MESSAGE IN MY CLASS I WILL ASK YOU TO LEAVE. IF YOU DO IT AGAIN, I WILL HAVE YOU REMOVED.

7. If you use a computer in class, or use a computer already provided in class, please only use it for class functions during class. Anything other than that is disruptive to other students and the instructor and will be reported.

The American Disabilities Act (ADA): a federal anti-discrimination stature 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 contact the Disability Services Office at (361) 825-5816 or come by and visit us 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.
VI. Schedule:

Progression of topics: (Always subject to change and alteration based on time and how fast we progress).

Unit I

Fatigue
Glucose and energy supply during exercise
Muscle and neuromuscular plasticity

Test # 1

Unit II

Cardiovascular system regulation and integration
Advanced Body Composition

Test # 2

VII. Text: I highly recommend this text.


NOTE REGARDING TEXT: There are many fine texts available for a class like this. You may choose to use one of them other than the recommended course text. I chose the above listed text because of its depth of information, graphics, and scope of topics. I feel it will lend you excellent background as well as progression of various topics.

YOUR EXAMS ARE A GOOD MIX OF NOTES, BOOK, CLASS, AND SCIENTIFIC ARTICLES! PLEASE TAKE NOTES WISELY. Self motivated learning is a MAJOR portion of this class, which is what mature students do anyway.
VIII. Bibliography:


