Kinesiology (KINE 8970) Course Syllabus Summer 2010

1. Course Number: KINE 8970

Course Title: Special Topics: Current Literature in Exercise Physiology

Credit Hours: 3 semester hours (Lecture 3)

Prerequisite: KINE 7680 or equivalent or departmental approval.

Corequisite: None

2. Course Instructor: L. Bruce Gladden. **Meeting Place & Time:** To Be Determined.

3. Text: None. We will be reading scientific papers from the literature.

- **4. Course Description:** Investigation, reading, synthesizing, and presenting current scientific literature in exercise physiology.
- **5. Course Objectives:** Upon completion of this course, students will understand:
 - 1. Basic concepts of research in exercise physiology;
 - 2. The range of key topics in the current literature of exercise physiology.

6. Course Content:

Approximately two scientific papers will be presented and discussed each week.

7. Course Requirements/Evaluation:

There will be <u>no</u> in-class meetings until the week of June 7th. I will contact all students during the week of June 7th to establish a meeting time for the remainder of the semester.

For the first 2.5 weeks of the semester (May 20 – June 7), out of class assignments will be done as follows: Locate **four** scientific papers related to exercise physiology that were published in the last five years. Read each paper and write a brief abstract/summary that includes the following **in your own words**.

- 1) Why the study was done (background).
- 2) Purpose of the study.
- 3) Brief outline of key methods that were employed.
- 4) Brief statement of the results.
- 5) Significance of the results.
- 6) Two questions that you have about the study.

This entire abstract/summary should be done in one typed page.

For the remainder of the semester, we will schedule weekly meetings with the format outlined below.

<u>Format:</u> This will be a journal club type of class. You must arrive at each class prepared to discuss the papers assigned for the day. We will read and discuss two papers per week.

Each student will present at least one scientific paper published within the last five years. Each presentation will last 12-18 minutes (must be in this range). The student will describe in HIS/HER OWN WORDS the background for the paper, the purpose of the paper, the methods used, the results, the conclusions, and the student's own evaluation of the paper. I recommend that PowerPoint slides be used as an aid for the presentation. Following the presentation, there will be several minutes of discussion that is moderated by the presenting student. The presenting student should attempt to keep the discussion moving. The paper to be presented must be cleared with me no later than one week prior to the scheduled presentation. The presenting student should make a copy of the paper available to the course instructor for posting on Blackboard immediately after the paper is approved. In order to be fully prepared, presenters should read 2-3 additional papers which relate to the paper they are presenting. All students are to read the primary paper prior to the presentation.

Each presentation will be graded on a 100% scale. Grade for the class will be determined by the average for however many papers each student presents.

 $\geq 90\%$ = A $\geq 80 \text{ but} < 90$ = B $\geq 70 \text{ but} < 80$ = C $\geq 60 \text{ but} < 70$ = D < 60% = F

In order to select a paper for presentation or for writing an abstract/summary (first 2.5 weeks), I suggest that you employ one or more of the following methods (or perhaps others that I have not listed):

1. Look through journals that include exercise physiology articles. Examples:

Acta Physiologica Scandinavica American Journal of Physiology

Canadian Journal of Applied Physiology

Canadian Journal of Physiology & Pharmacology

European Journal of Applied Physiology & Occupational Physiology

International Journal of Sports Medicine

Journal of Applied Physiology

Journal of Physiology

Medicine and Science in Sports and Exercise

Muscle and Nerve Pflügers Archive

3. Do an Entrez PubMed Computer search – it allows you to use subjects, key words,

- combinations of key words, and authors' names. You may also try Google Scholar.
- 4. Use the Science Citation Index/Web of Science. Access this through the AU Libraries website. At the Web of Science site, you can enter an author name and a year and the site will return the articles that fit that description AND you can get a list of articles that have cited the article in question. So, the useful feature of this system is that if you find one paper that is interesting, you can use this index to see if any later publications have cited the original paper.

8. Class Policy Statements:

Participation - It is expected that students taking a graduate class will attend every class meeting and will actively participate in class discussions. Please refer to the current edition of the <u>Tiger Cub</u> (http://www.auburn.edu/tigercub) for the definition of excused absences. Students are expected to show evidence of thorough reading of assigned papers. Students are responsible for initiating arrangements for missed work.

Unannounced Quizzes – There is the possibility of unannounced quizzes in this class. If given, the scores will be included in determination of the overall grade.

Accommodations - Students who need special accommodations in class, as provided for by the American Disabilities Act, should arrange a confidential meeting with the instructor during office hours the first week of classes - or as soon as possible if accommodations are needed immediately. You must bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have these forms but need accommodations, make an appointment with the Program for Students with Disabilities, 1244 Haley Center, 844-2096.

Honesty Code – The University Academic Honesty Code and the <u>Tiger Cub</u> Rules and Regulations pertaining to Cheating will apply to this class.

Professionalism – As faculty, staff, and students interact in educational settings, they are expected to demonstrate professional behaviors as defined in the College of Education's conceptual framework. These professional commitments or dispositions are as follows: 1) engage in responsible and ethical practices, 2) contribute to collaborative learning communities, 3) demonstrate a commitment to diversity, and 4) model and nurture intellectual vitality.