Course Syllabus
KINS 2010: Introduction to Exercise Science

Instructor: Dr. Michael O'Connor, Ramsey Center, Room 373, 542-4456, mjo@uga.edu. Office hours: 8:00-9:00 AM, M-F or by appointment.

Course Description: This course is a survey of the foundations underlying the field of exercise science. The course surveys the general knowledge base of the discipline as reflected in the major subdisciplines and reviews selected concepts in each. In addition, the course introduces students to the general characteristics of the professions typically pursued by those graduating from a program of exercise science, and assists them in making some early career decisions. Typically this will be done by presentations by department faculty on their experiences, their research interests, how students might become involved in their research activities, and recommendations for employment.

Course Objectives:

1. Demonstrate understanding of the professional opportunities available to exercise science majors.
2. Demonstrate understanding of the historical, philosophical, psychological, physiological, biomechanical, and motor behavior components essential to the study of exercise science.
3. Understand the importance of scientific inquiry to professionals.
4. Demonstrate understanding of the curricular timeline to successfully complete a exercise science degree.

Course Policies and Procedures:

1. This syllabus is a general plan for the course and deviations announced to the class by the instructor may be necessary.
2. Daily attendance is not required. Failure to attend, however, will directly influence your grade since class quizzes will be given randomly.
3. Students desiring to withdraw from this class must do so by midterm.
4. I encourage you to read the policy on academic honesty in the College Catalog. All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work.
5. Make up exams are possible with a valid (medical or family emergency) excuse.
6. You are expected to be in class, prepared, and ready to participate on time. Arriving late or leaving early is disruptive and rude to your classmates and the instructor.

Text: Housh, T.J., Housh, D.J. & Johnson, G.O. (Ed.) (3rd E, 2008). Introduction to Exercise Science, San Francisco, CA: Benjamin Cummings.

Course Evaluation:
Electronic Database Research Project – 25 points
Exam # 1 – 30 points
Exam # 2 – 20 points
Exam # 3 – 20 points
Quizzes – 5 points
Extra Credit – Possible 4 points

Grading:

A = > 93%	A- = 90-92.9%
B+ = 87-89.9%	B = 83-86.9%
B- = 80-82.9%	C+ = 77-79.9%
C = 70-76.9	C- = 65-69.9%
D = 60-64.9%	F = less than 60%

Electronic Database Research Project (25% of your grade):
The main purpose of this assignment is for you to learn how to access and retrieve scholarly Exercise Science-related material using electronic databases. A second purpose is for you to learn in-depth, state-of-the-art information about an Exercise Science topic of interest to you.

Step 1. Identify an exercise-related question: (i) that you are interested in knowing the answer to, and (ii) about which research results have been published. If there is little or no published research on the topic that interests you then you will need to find another topic. You will do this by searching in either Google Scholar http://scholar.google.com/ or one of the following major medical or psychological science databases: Medical = Medline or PubMed; Psychological = PsycInfo or PsycArticles. These databases are available at the UGA's Library's homepage: http://www.libs.uga.edu. You can access PubMed by clicking on the letter P under the *Articles* tab and then finding the entry in the alphabetical listing. For the other databases mentioned, start at the homepage: http://www.libs.uga.edu and then under the *Articles* tab, choose Exercise Science as your area of interest. Under this subject heading, you will also see the database Physical Education Index. This is a very narrow database containing citations from only 458 of the major physical education journals. Medline/PubMed or one of the psychological databases will provide a much broader treatment of your topic.

Terms to use in your database research should be either "exercise" or "physical activity" or "fitness" or inactivity" or a specific sport or activity. The other term should be a general topic of interest. General topics include the effects of exercise on muscle, bone, heart, heart disease, blood pressure, cholesterol, diabetes, mortality, metabolism, stroke, cancer, osteoarthritis, pain, obesity, chronic obstructive pulmonary disease, immunity, anxiety, depression, fatigue, eating disorders, personality, self esteem, and sleep. Other topics include perceived exertion, biomechanics, gait, footwear, hormones, aging, altitude, knee and other injuries, running, cycling or swimming performance.
You may obtain and read review articles in order to put your research topic into proper perspective; however, your focus should be on data-based articles and NOT on review articles. Data-based articles contain data and original research. Review articles

synthesize information from others' research. In data-based articles, it is mentioned in the article that animals or subjects were tested, methods of testing are described, and tables or figures of the data are presented. Review articles summarize a host of data-based articles. Review articles can often be identified because they have the word "review", "summary", or "beta-analysis" in the title, and they present no data. If you do come across a review article on a topic of interest, you may benefit by reading it and finding data-based articles in the reference list that the authors of the review paper read and used to address your question. You can then obtain these data-based articles and use them for this assignment.

Step 2. Once you think that you have identified an appropriate topic obtain three articles that are most similar in order to address your question. Read these articles and find out the answer to your question.

Step 3. Submit a typed one page document that includes: (1) your exercise related question in a question format, (2) your answer to the question, and (3) a reference list of articles you used (a suggested format for references is APA). Use your own words; do not use the words of the authors of the journal articles you read (also do not summarize the journal articles you read).The main purpose of this assignment is for you to learn how to access and retrieve scholarly Exercise Science-related material using electronic databases. A second purpose is for you to learn in-depth, state-of-the-art information about an Exercise Science topic of interest to you.

Extra Credit:
You may earn up to four points extra credit either by (1) reading and summarizing published exercise science related research or (2) participation in a Department of Kinesiology research project and (3) participation on a team that proposes an exercise adherence proposal.

(1) Prior to March 5th obtain the approval from your instructor for a specific exercise science topic. Read and summarize a data based journal article on that subject. Turn in a two page paper that includes the following sections: Citation; Rationale for the study; Methods employed (i.e., what was done); Results (or prediction of what the results will show); and Discussion/Evaluation (what did you think of the study). Critical to getting full credit is a meaningful discussion/evaluation section. This option will not be available after March 5th (possible 2 points)
(2) Participate as a subject in Department of Kinesiology research study. You will be informed in class of ongoing research projects and will be able to sign up for participation at that time. Once you complete your participation in the research study you will inform the instructor by email with an overview of the study you participated in. Participation must be during the fall semester (possible 2 points).
(3) You will have the opportunity to work with a group of other students (between 3-5 students) on a project to promote exercise (possible 2 points). The intervention will be presented to the entire class.

Tentative Class Schedule

Class	Day	Date	Topic
1	M	Jan 12	Introduction
2	W	Jan 14	Electronic Data Base Research - Ms. Hartle, UGA
	M	Jan 19	MLK Holiday
3	W	Jan 21	Conducting Electronic Data Base Research (lab)
4	M	Jan 26	Getting into the EXRS Science Program
5	W	Jan 28	Getting into the Athletic Training Program
6	M	Feb 2	Exercise Physiology–Read Ch 6 -Dr. Cureton, UGA
7	W	Feb 4	History of EXRS – Read Ch 1 & 2
8	M	Feb 9	Athletic Training – Read Ch 8 - Dr. Brown, UGA *Electronic Data Base Research Paper Due*
9	W	Feb 11	Biomechanics – Read Ch 10 – Mr. Bowser, UGA
10	M	Feb 16	Exercise and Aging – Dr. Cress, UGA
11	W	Feb 18	Cardiovascular Ex. Phy. - Dr. McCully, UGA
12	M	Feb 23	Cardiac Rehab - Dr. DuVal, UGA
13	W	Feb 25	Exam # 1
14	M	Mar 2	Motor Cont. & Learn – Read Ch 10 – Dr. Tomporowski, UGA
15	W	Mar 4	Measurement – Read Ch 4 - Dr. Baumgartner, UGA
16	M	Mar 16	Sport Nutrition – Read Ch 9 – Ms. Taylor, UGA
17	W	Mar 18	Sport Psychology - Read Ch 12 – Dr. Dishman, UGA
18	M	Mar 23	Exercise Epidemiology – Read Ch 7 - Dr. Schmidt, UGA
19	W	Mar 25	Occupational Therapy – Dr. Schell, Brenau U
20	M	Mar 30	Exam # 2
21	W	Apr 1	Physical Therapy –Dr. Thompson, ArmstrongAU
22	M	Apr 6	SGR Report on Physical Activity & Health
23	W	Apr 8	Pre Med Advising – Dr. McCully, UGA
24	M	Apr 13	Resume/Graduate School - Mr. Ken Hansing, UGA
25	W	Apr 15	Lab Walk
26	M	Apr 20	Physician Assistant – Ms. Badach, UGA
27	W	Apr 22	Wellness
28	M	Apr 27	Exam # 3
29	W	Apr 29	SGR Competition
30	F	May 8	Final