# Department of Kinesiology KINE 5550 - 6550

## Exercise Technology II: Applied of Exercise Testing and Interpretation

**Fall 2012** 

Credit Hours: 4 hours; Lec 1, Lab 6

Prerequisites: KINE 5500/6500 - Exercise Technology I

Instructor: Dr. Jim McDonald Email: jrm0013@auburn.edu

Office: Room 2070, Coliseum

Office Hours: Tues & Thurs Office Phone: 844-1462

1:00 - 3:00 pm

#### **5500/6500 TEXTBOOKS**

**Exercise Physiology,** Scott Powers & Edward Holley, McGraw Hill, 8<sup>th</sup> Edition, 2012, ISBN 978-0-07-802253-1

ACSM's Health-Related Physical Fitness Assessment Manual, Lippincott, Williams & Wilkins, 3<sup>rd</sup> Edition, 2007, ISBN 0-7817-7549-6

#### **Supplemental Textbooks:**

ACSM's Guidelines for Exercise Testing and Prescription. Lippincott, Williams & Wilkins,  $8^{th}$  Edition, 2009, ISBN 0-7817-6903-7

Practical ECG for Exercise Science and Sports Medicine, G. Whyte and S. Sharma, Human Kinetics, 2010, ISBN 978-0-7360-8194-8

## **COURSE DESCRIPTION**

This class provides practical experience in cardiovascular and musculoskeletal exercise evaluation and prescription; interpretation of exercise test results for exercise prescription and health risk stratification. CPR certification must be current.

## **Student Learning Outcomes:**

After successfully completing this course, you will be able to: Perform health and fitness assessments in a clinical environment. The student will be able to conduct pulmonary function, body composition, cardiorespiratory fitness, muscular fitness, flexibility and balance testing. The student will be able to clearly explain the tests and why they are conduct to a client and will be able to interpret the results of the various tests. The student will be capable of explaining test results and making exercise prescription recommendations.

### **Course content outline:**

| Week 1 – 20 Aug  | Class overview, Health screening & informed consent CVD Risk Assessment & Pulmonary testing |
|------------------|---|
| Week 2 – 27 Aug  | Body composition testing<br>Muscular Fitness and balance testing                            |
| Week 3 – 3 Sep   | Cardiorespiratory Fitness testing<br>Cardiorespiratory Fitness testing                      |
| Week 4 – 10 Sep  | Practice Tiger <i>Fit</i> Practice Tiger <i>Fit</i>   |
| Week 5 – 17 Sep  | Blue team Tiger <i>Fit</i> Orange team Tiger <i>Fit</i>                                     |
| Week 6 – 24 Sep  | Blue team Tiger <i>Fit</i> Orange team Tiger <i>Fit</i>                                     |
| Week 7 – 1 Oct   | Blue team Tiger <i>Fit</i> Orange team Tiger <i>Fit</i>                                     |
| Week 8 – 8 Oct   | Blue team Tiger <i>Fit</i> Orange team Tiger <i>Fit</i>                                     |
| Week 9 – 15 Oct  | Blue team Tiger <i>Fit</i> Orange team Tiger <i>Fit</i>                                     |
| Week 10 – 22 Oct | Blue team Tiger <i>Fit</i> Orange team Tiger <i>Fit</i>                                     |
| Week 11 – 29 Oct | Blue team Tiger <i>Fit</i> Orange team Tiger <i>Fit</i>                                     |
| Week 12 – 5 Nov  | Blue team Tiger <i>Fit</i> Orange team Tiger <i>Fit</i>                                     |

Week 13 – 12 Nov Blue team Tiger Fit

Orange team TigerFit

Week 14 - 19 Nov Thanksgiving

Week 15 – 26 Nov Internship preparation

Class review

#### **Grading Scale**

Your course grade will be determined by your performance during the Tiger Fit clinics, your preparation of client reports and your quiz grades. There are a total of 500 points available. In order to receive an "A", you must earn  $\geq 90\%$  of the total points, 500-450 points. In order to receive a "B", you must earn between 80 - 89% of the total points, 449 - 400 points. In order to receive a "C", you must earn between 70 - 79% of the total points 399 - 349.

#### **Quizzes – 100 points**

During the semester there will be of the course there will be 10 quizzes given, each worth 10 points. The quizzes will focus on procedures and information you need to know to perform your job during the **Tiger** sessions and to help prepare you for the ACSM HFS exam. The quizzes will cover the specific topics of a previous lesson.

#### Tiger Fit Lab Performance - 300 points

**TigerFit** testing dates are scheduled on 9 weeks throughout the semester. Each weekly evaluation will be worth 33.3 points. You will be evaluated during the **TigerFit** sessions on professionalism, knowledge and competency in assigned duties either at a specific wok station or as a client host. A typical grade sheet will be posed on Canvas. You should recognize that the grading for each of these areas is somewhat subjective. Therefore, you will have the opportunity to review and discuss your current weekly evaluation form during the week following each evaluation. Weekly evaluation scores will be counted towards your overall course grade one week after the evaluation date (immediately after you have been able to review and discuss your scores with the instructor).

#### **Report Preparation - 100 Points**

You will be responsible for accurately recording and interpreting client results when you act as a client host. Every student will have the opportunity to host multiple times and grades will be normalized to account for those with fewer opportunities to host. You will be graded on their ability to manage data, calculate and record health estimates from physiologic measurements (e.g., pulmonary function results, skin fold, hydrostatic weighing results, musculoskeletal assessment scores, cardiovascular responses to exercise, blood sample reports) and accurately record the results on client report forms. You will prepare the client's **TigerFit** report based on a template provided on Canvas. You are expected to input the client's data correctly and ensure the report accurately reflects the results. Additionally, you will be asked to review the exercise prescription and make recommendations

#### **Class Policies**

**Attendance:** Attendance is required for scheduled Tiger *Fit* sessions. Missing clinic hours will not only hurt the individual student but is detrimental to the Tiger *Fit* program and our clients. Therefore, students who miss a scheduled Tiger *Fit* session will lose all points associated with that session. Because our Tiger *Fit* clinics have clients with appointments throughout the scheduled time punctuality is paramount. If a students is late to the clinic they will lose 11 points our of the possible 33.3 pts for the given session. Excused absences as defined in the Student Policy eHandbook, www.auburn.edu/studentpolicies, will not result in lost points.

**Accommodations:** Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by e-mail. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).

**Honesty Code:** Students are expected to do their own work and cheating will not be tolerated. Please see University policies at <a href="https://sites.auburn.edu/admin/universitypolicies/default.aspx">https://sites.auburn.edu/admin/universitypolicies/default.aspx</a>