Course Inventory Change Request

Date Submitted: 07/30/14 3:55 pm

Viewing: **KINE 5500 : Exercise Technology I: Principles of Exercise Testing and Interpretation**

Changes proposed by: MARTROH

<table>
<thead>
<tr>
<th>Submitter:</th>
<th>User ID: MARTROH</th>
<th>Phone: 844-1453</th>
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</thead>
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Co Requisite  
Description  
Other Change Type  
Pre Requisite  
Schedule Type/Credit  
Content revision

Proposing College/School: College of Education

Department: School of Kinesiology

Effective Term: Fall 2015

Subject Code: Kinesiology (KINE)

Course Number: 5500

The faculty would like to split the lecture and lab portions of this undergraduate course to provide more flexibility in the scheduling and registration of this course. This will allow for the listing of multiple lecture and lab times while allowing students to select the most appropriate lecture and lab times for their schedule. Due to the increased demand for this course, it is becoming more difficult to accommodate the students in a set lecture/lab time each term. Separating the lecture and labs should allow more flexibility in accommodating these students. Students in this course should have Junior or Senior standing and should be restricted to include PAHB or FCPB majors only. The corequisite course will be the KINE 5501 lab. KINE 3680 is a prerequisite with concurrency. May count KINE 5500 & 5501 or KINE 6500.

In Workflow

1. KINE Editor  
2. KINE Chair  
3. ED Undergraduate Curriculum Committee Chair  
4. ED Editor  
5. ED Associate Dean  
6. Coordinator Curriculum Management  
7. University Curriculum Committee Chair  
8. Coordinator Curriculum Management

Approval Path

1. 07/30/14 3:55 pm  
   MARTROH: Approved for KINE Editor  
2. 07/30/14 4:19 pm  
   RUDISME: Approved for KINE Chair  
3. 08/11/14 10:35 am  
   WOLFS1A1: Approved for ED Undergraduate Curriculum Committee Chair  
4. 08/13/14 2:00 pm  
   DAVISS7: Approved for ED Editor  
5. 08/17/14 11:26 am  
   VILLASE: Approved for ED Associate Dean  
6. 09/16/14 8:15 am  
   KTS0004: Approved for Coordinator Curriculum Management  
7. 09/16/14 1:52 pm  
   RELIHC0: Approved for University Curriculum Committee Chair
**Course Title:** Exercise Technology I: Principles of Exercise Testing and Interpretation  
**Abbreviated Title:** Exercise Technology I

<table>
<thead>
<tr>
<th>Schedule Type</th>
<th>Contact/Group Hours</th>
<th>Weekly or Per Term?</th>
<th>Credit Hours</th>
<th>Anticipated Enrollment</th>
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<tbody>
<tr>
<td>LLB</td>
<td>6</td>
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**Course Credit:**

| Lecture       | 3 Weekly            | 3                   | 35           |

Can the course be repeated? No  
Total Credit Hours: 3-4

**Grading Type:** Standard Grades

**Prerequisites:** P/C: KINE 3680

**Prerequisite Courses:**

**Corequisites:** KINE 5501 - Exercise Technology I: Principles of Exercise Testing and Interpretation (Laboratory)

**Restrictions:**

Include Junior  
Include Senior

Other Restrictions:  
Include PAHB & FCPB

**Admin Restrictions:**  
Fitness Cond & Perform Option ONLY (SCRRMAJ_ONLY_FCPB)  
Physical Activity & Health ONLY (SCRRMAJ_ONLY_PAHB)

**Course Description:**  
Concepts in physiological testing, test selection, and interpretation of assessments in normal and special populations for the purpose of exercise prescription and chronic disease risk reduction. CPR certification must be obtained prior to the end of the course.

**May Count Either:** KINE 5500- Exercise Technology I: Principles of Exercise Testing and Interpretation  
or KINE 6500- Exercise Technology I: Principles of Exercise Testing and Interpretation

**Affected Program(s):**

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Program Title</th>
<th>Requirement or Elective?</th>
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<tbody>
<tr>
<td>Major</td>
<td>Physical Activity &amp; Health (PAHB)</td>
<td>Requirement</td>
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<tr>
<td>Major</td>
<td>Fitness, Conditioning</td>
<td>Requirement</td>
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<tr>
<td>Program Type</td>
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<td>Requirement or Elective?</td>
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<td>&amp; Performance (FCPB)</td>
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Overlapping or Duplication of Other Units' Offerings: No

Resources

No additional resources are needed at this time.

After successfully completing this course, you will be able to:

1. Explain and discuss the underlying principles and rationale for health and fitness screening, blood profile analysis, measurements of heart rate, rhythm and electrical activity, blood pressure, cardiorespiratory fitness (CRF) testing, body composition, pulmonary testing, musculoskeletal fitness and sports related testing.
2. Understand and explain the basic pathophysiology related being sedentary and obese including cardiovascular disease, pulmonary disease, dyslipidemia, hypertension, diabetes, and metabolic syndrome. Identify general drug groups associated with medical intervention in these diseases.
3. Using pre-test screening to determine the appropriateness of exercise, exercise testing, and cardiovascular disease risk stratification based on blood pressure, cholesterol levels, physical activity or other factors.
4. Understand basic safety considerations for an exercise facility and for exercise testing. Understand basic treatment for common injuries seen in a exercise facility
5. Understand direct and indirect techniques to assess muscular strength, flexibility, and endurance.
6. Understand the underlying principles of body composition testing and become familiar with techniques to estimate body composition using the skin-fold methods, bioelectrical impedance, DEXA and anthropometrical techniques.
7. Understand the physiologic basis of blood pressure, including causes of elevated blood pressure and methods to lower blood pressure.
8. Understand the cardiorespiratory changes that occur with exercise and how it can be measured. Understand testing methods to determine aerobic exercise capacity
9. Demonstrate proficiency using metabolic calculations to determine body composition, estimates of cardiovascular capacity, exercise energy expenditure and exercise workloads.
10. Demonstrate the ability to prepare a subject for a 12-lead electrocardiogram. And be familiar with a normal ECG reading at rest and during a graded exercise test.

11. Understand and discuss exercise testing in sport and identify specific types of testing including agility, speed, power.

Is this course considered University Core?

No

Course Content Outline

Week 1 – Class overview, Careers in Fitness and Internships, Physical Activity and Health

Week 2 – Physical activity and disease, Physical Activity Screening, Risk Factor Assessment

Week 3 – Risk Classification, Principles of Exercise testing, Body Composition

Week 4 – Body Composition, Obesity and chronic disease, Blood Pressure

Week 5 – Cardiorespiratory Fitness, Cardiorespiratory Fitness Assessment

Week 6 – Electrocardiogram, Exercise Prescription for Cardiorespiratory Healthy Populations, Test #1

Week 7 – Muscular Strength and Endurance, Muscular Strength and Endurance, Exercise Prescription for Muscular Fitness in Healthy Populations

Week 8 – Assessing Flexibility, Exercise Prescription for Flexibility, Assessing Balance

Week 9 – Balance Training Programs, Testing for Muscular Fitness, Testing for Muscular Fitness

Week 10 – Exercise Prescription for Muscular Fitness, Assessing Flexibility, Test #2

Week 11 – Basic Nutrition, Weight Management

Week 12 – Exercise Programming Across the Lifespan

Week 13 – Chronic Disease and Exercise

Week 14 - Behavior Change, Test #3

Week 15 – Health and Fitness Business, Review for Final
Week 16 – Final Exam

There will be a total of 3 exams each worth 50 points and a final worth 100 points. Exams are designed to test your knowledge in areas covered in assigned readings, lectures and laboratory experiences. Make-up exams will only be given for students with documented excused absences.

There are a maximum of 250 total points available in this course.

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There are a maximum of 250 total points available in this course.

Grades

"A" = 250 - 226;
"B" = 225 - 201;
"C" = 200 - 176;
"D" = 175 - 151;
"F" = 150 and below