DAY/TIME: TR 1:30PM – 3:35PM
LOCATION: RAC 2203 & 1001, M – R
PROFESSOR: Dr. Jason White
EMAIL ADDRESS: jwhite35@gmu.edu
OFFICE LOCATION: SciTech Bull Run Hall 210
PHONE NUMBER: 703-993-5879
OFFICE HOURS: by appointment

PREREQUISITES
BIOL 124, BIOL 125, ATEP 300

COREQUISITES
KINE 310

COURSE DESCRIPTION
Provides students with basic knowledge and skills associated with exercise training methods, lifting techniques, and health-related fitness testing procedures. Selection of developmentally appropriate exercises emphasized. Participation in fitness tests required.

COURSE OBJECTIVES
Upon completion of this course, students should be able to:
1. Demonstrate appropriate technique when performing resistance training exercises;
2. Select developmentally appropriate exercises;
3. Discuss principles associated with resistance training;
4. Administer tests associated with health-related fitness,
5. Perform health-related fitness tests.

COURSE OVERVIEW
Lecture and lab experiences are used to introduce the following topics: relationship between fitness and quality of life; health related components of physical fitness; principles of exercise prescription and physical training; relationship between exercise, and healthy body composition; basic musculoskeletal anatomy and corresponding training exercises, planes of movement, basic biomechanical principles; lifting techniques; fitness testing.

ACCREDITATION STANDARDS
This course meets the Commission on Accreditation of Allied Health Education Programs (CAAHEP) requirements and covers the following American College of Sports Medicine’s Knowledge-Skills-Abilities (KSA's):

<table>
<thead>
<tr>
<th>KSA</th>
<th>Description</th>
<th>Lecture, Lab, or both</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL POPULATION/CORE: EXERCISE PHYSIOLOGY AND RELATED EXERCISE SCIENCE</td>
<td></td>
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<tr>
<td>1.1.37</td>
<td>Knowledge of and skill to demonstrate exercises designed to enhance muscular strength</td>
<td>Both</td>
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<tr>
<td>Course Component</td>
<td>Description</td>
<td>Delivery Method</td>
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<td>and/or endurance of specific major muscle groups.</td>
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<td>Both</td>
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<tr>
<td>1.1.38</td>
<td>Knowledge of and skill to demonstrate exercises for enhancing musculoskeletal flexibility.</td>
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<tr>
<td><strong>GENERAL POPULATION/CORE:</strong></td>
<td><strong>HEALTH APPRAISAL, FITNESS AND CLINICAL EXERCISE TESTING</strong></td>
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<tr>
<td>1.3.1</td>
<td>Knowledge of and ability to discuss the physiological basis of the major components of physical fitness: flexibility, cardiovascular fitness, muscular strength, muscular endurance, and body composition.</td>
<td>Lecture</td>
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<tr>
<td>1.3.16</td>
<td>Ability to instruct participants in the use of equipment and test procedures.</td>
<td>Lab</td>
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<tr>
<td>1.3.21</td>
<td>Ability to identify appropriate criteria for terminating a fitness evaluation and demonstrate proper procedures to be followed after discontinuing such a test.</td>
<td>Both</td>
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<tr>
<td><strong>GENERAL POPULATION/CORE</strong></td>
<td><strong>EXERCISE PRESCRIPTION AND PROGRAMMING</strong></td>
<td></td>
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<tr>
<td>1.7.4</td>
<td>Knowledge of specific group exercise leadership techniques appropriate for working with participants of all ages.</td>
<td>Lecture</td>
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<tr>
<td>1.7.5</td>
<td>Knowledge of how to select and/or modify appropriate exercise programs according the age, functional capacity and limitations of the individual.</td>
<td>Lecture</td>
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<tr>
<td>1.7.6</td>
<td>Knowledge of the differences in the development of an exercise prescription for children, adolescents, and older participants.</td>
<td>Lecture</td>
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<tr>
<td>1.7.7</td>
<td>Knowledge of and ability to describe the unique adaptations to exercise training in children, adolescents, and older participants with regard to strength, functional capacity, and motor skills.</td>
<td>Lecture</td>
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<tr>
<td>1.7.8</td>
<td>Knowledge of common orthopedic and cardiovascular considerations for older participants and the ability to describe modifications in exercise prescription that are indicated.</td>
<td>Lecture</td>
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<tr>
<td>1.7.15</td>
<td>Knowledge of the components incorporated into an exercise session and the proper sequence (i.e., preexercise evaluation, warm-up, aerobic stimulus phase, cool-down, muscular strength and/or endurance, and flexibility).</td>
<td>Lecture</td>
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<tr>
<td>1.7.19</td>
<td>Knowledge of the exercise programs that are available in the community and how these programs are appropriate for various populations.</td>
<td>Lecture</td>
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<tr>
<td>1.7.20</td>
<td>Knowledge of and ability to describe &quot;Activities of Daily Living&quot; (ADLs) and its importance in the overall health of the individual.</td>
<td>Lecture</td>
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<tr>
<td>1.7.21</td>
<td>Skill to teach and demonstrate the components of an exercise session (i.e., warm-up, aerobic stimulus phase, cool-down, muscular strength/endurance, flexibility).</td>
<td>Both</td>
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<tr>
<td>1.7.23</td>
<td>Skill to teach and demonstrate appropriate exercises for improving range of motion of all major joints.</td>
<td>Both</td>
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<tr>
<td>1.7.33</td>
<td>Ability to design, implement, and evaluate individualized and group exercise programs based on health history and physical fitness assessments.</td>
<td>Lecture</td>
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<tr>
<td>1.7.43</td>
<td>Ability to evaluate flexibility and prescribe appropriate flexibility exercises for all major muscle groups.</td>
<td>Lab</td>
</tr>
<tr>
<td><strong>GENERAL POPULATION/CORE:</strong></td>
<td><strong>SAFETY, INJURY PREVENTION, AND EMERGENCY PROCEDURES</strong></td>
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<tr>
<td>1.10.8</td>
<td>Knowledge of hypothetical concerns and potential risks that may be associated with the use of exercises such as straight leg sit-ups, double leg raises, full squats, hurdles stretch, yoga plough, forceful back hyperextension, and standing bent-over toe touch.</td>
<td>Lecture</td>
</tr>
</tbody>
</table>

**Attendance and Participation**

Attendance is required for this class. Arriving to class late or leaving early will be counted as an absence. Students are expected to show up prepared to class and participate during class activities. Students who know they will need to miss a class for a legitimate reason should contact the instructor before the class. Students who unexpectedly miss a class for an excused reason should contact the instructor within 24 hours of missing the class. Make-up tests, quizzes, assignments, or other grades will be granted for excused absences only. Excused absences
include: serious illness, official university excused absences and extenuating circumstances. It is the student’s responsibility to contact the instructor in order to obtain the make-up work.

**Academic Load**
In addition to attending the lectures there will be regular assignments that may require up to 15 hours of work per week. Additionally, regular readings will be assigned to students. Students are expected to complete all outside work on time. Extensions will not be granted on assignments unless an extenuating circumstance arises. The purpose of the assignments is to aid students in learning the material.

**Honor Code**
Students are held to the standards of the George Mason University Honor Code (see [http://honorcode.gmu.edu](http://honorcode.gmu.edu) for details). Violations, including cheating and plagiarism, will be reported to the Honor Committee. Student assignments may be put through plagiarism detecting software.

**Assignments**
All assignments must be typed unless specifically told not to. A loss of points will occur for improper grammar and spelling. It is recommended students save all assignments on their personal computers and/or a back-up device.

**Class Delivery**
The course is a mix of a lecture and discussion course. However, other approaches may be used to facilitate learning. These include: videos, demonstrations, on-line quizzes and assignments, and in-class activities. Overall this will be a highly interactive class and students will be encouraged to participate.

**Technology Use during Class**
As per GMU policy, all sound emitting technology is required to be turned off during the class meeting time. No sound emitting technology (e.g., cell phones, smart phones, iPads, Tablets, pagers, etc.) is allowed at any time during the class period. Students who are observed using any form of technology inappropriately (e.g., sending text messages from cell phones, visiting social networking sites from laptops, etc.) will be dismisses from class for the day, counted as an absence, and not permitted to make up missed assignments.

**Correspondence**
The preferred method of communication outside of class is email. Emails should originate from a George Mason email account and be in a professional format. If email does not originate from a George Mason University account, the instructor will not reply to the email. Emails should be written concisely and rechecked for clarity.

**Academic Integrity**
GMU is an Honor Code University; please see the University Catalog for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? First, it means that when you are responsible for a task, you will be the one to perform that task.
When you rely on someone else’s work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives and traditions. When in doubt, please ask for guidance and clarification.

REQUIRED READINGS:

SUGGESTED READINGS:

EVALUATION

Needs Analysis or Lesson Plan 10%
Students will design an initial one-week fitness program for an assigned fictional client (KINE students only)

Exam 1 20%
The mid-term exam will cover material through week 3.

Final Exam 25%
The final exam will cover material primarily from weeks 3-5.

Quizzes 15%

Labs/Practical 30%

Total 100%

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>94 – 100</td>
</tr>
<tr>
<td>A-</td>
<td>90 – 93</td>
</tr>
<tr>
<td>B+</td>
<td>88 – 89</td>
</tr>
<tr>
<td>B</td>
<td>84 – 87</td>
</tr>
<tr>
<td>B-</td>
<td>80 – 83</td>
</tr>
<tr>
<td>C+</td>
<td>78 – 79</td>
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<tr>
<td>C</td>
<td>74 – 77</td>
</tr>
<tr>
<td>C-</td>
<td>70 – 73</td>
</tr>
<tr>
<td>D</td>
<td>60 – 69</td>
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<tr>
<td>F</td>
<td>0 – 59</td>
</tr>
<tr>
<td>B-</td>
<td>80 – 83</td>
</tr>
<tr>
<td>C-</td>
<td>70 – 73</td>
</tr>
</tbody>
</table>
TENTATIVE COURSE SCHEDULE
(*Schedule Open to Variation)

May 16
Lecture: Course Overview, Policies, Orientation to Blackboard, Anatomical Terms
Lab: Muscles, levers and joints
Lecture: Intro to movement and motor control
Lab: Pre-testing
Lecture: Biomechanical factors of movement
Lecture: Biomechanical factors of movement
Lab: Flexibility, body weight & stability ball exercises
Lecture: Human movement terminology
Lab: Leverage, projection, balance and impact
Lecture: Anatomical systems: Bioenergetics
Lecture: Anatomical systems: Nervous
Lecture: Anatomical systems: Musculoskeletal
Lecture: Anatomical systems: Cardiorespiratory
Lab: Cardiovascular/Aerobic Assessment

June 6
Lecture: **Midterm Exam I**
Lab: Anaerobic testing
Lecture: Test review and Fitness Principles
Lab: Predicting VO2 and applying submaximal testing
Lecture: Flexibility
Lecture: Body Composition
Lab: Lift Technique
Lecture: CRE
Lab: Muscular Endurance Assessment
Lecture: CRE
Lecture: Resistance Training
Lab: Alignment and Resistance and 1RM
Lecture: Resistance Training
Lab: Speed, agility and quickness
Lecture: Complete Fitness
Lab: No lab (Record food intake/take pics of meals for nutrition lab)
Lecture: Complete Fitness
Lab: Understanding Nutrient Intake (bring laptops to class)
Lecture: Nutrition
Lecture: Review

June 16 1:30 PM – FINAL EXAMINATION (Partially Comprehensive)

Note: Faculty reserves the right to alter the schedule as necessary to enhance student learning.

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See http://oai.gmu.edu/the-mason-honor-code/].

- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, as soon as possible. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor [See http://ods.gmu.edu/].

- Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/].

- Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly.
All communication from the university, college, school, and program will be sent to students solely through their Mason email account.

- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

**Campus Resources**

- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students’ personal experience and academic performance [See http://caps.gmu.edu/].

- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See http://writingcenter.gmu.edu/].

- For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See http://rht.gmu.edu].

**PROFESSIONAL BEHAVIOR:** Students are expected to exhibit professional behaviors and dispositions at all times.

**CORE VALUES COMMITMENT:** The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles.