# GEORGE MASON UNIVERSITY School of Recreation, Health, and Tourism

KINE 360 (PHED 364): Strength Training: Concepts & Applications (3) Spring 2012

DAY/TIME: TTH 9:00 – 10:15am LOCATION: PW – BRH 148

PROFESSOR: Dr. Jan Redmond EMAIL jredmon2@gmu.edu

ADDRESS:

OFFICE LOCATION: PW - BRH 210A PHONE 703-993-7118

NUMBER:

OFFICE HOURS: TTh 12:00-12:30 or FAX NUMBER: 703-993-2025

by appointment

# **PREREQUISITES**

BIOL 124, BIOL 125, KINE 300, KINE 310

# **COURSE DESCRIPTION**

Provides students with an opportunity to develop an in-depth understanding of the principles of strength training and conditioning, including: anatomical and physiological considerations, lifting techniques, equipment selection, program development/evaluation, and weightlifting safety; thus enabling them to teach and train client.

# **COURSE OBJECTIVES**

Upon completion of KINE 360 students should be able to:

- 1. Demonstrate an understanding of the physiological adaptations to resistance training.
- 2. Explain the role of bioenergetics to metabolic specificity of training.
- 3. Evaluate and design programs for developing strength, power, speed, and conditioning.
- 4. Analyze the value of Olympic lifting to athletic performance.
- 5. Examine the difference between strength training and power training.

#### COURSE OVERVIEW

Emphasis will be placed upon assessment, description, and analysis of sport movement and designing training programs to enhance performance variables. While this course will assist those who desire to sit for the National Strength and Conditioning Association's (NSCA) Certified Strength and Conditioning Specialist (CSCS) Exam, it is NOT a preparation course for the NSCA-CSCS exam. Material for the course will be drawn from the required textbook and assigned readings of published research. Class lectures will be presented in PowerPoint and posted on BLACKBOARD..

# NATURE OF COURSE DELIVERY

This course will be delivered in a face-to-face type of environment. This class will consist of both lecture and laboratory instruction.

# **REQUIRED READINGS**

Baechle, Thomas R. & Roger Earle (ed.). *Essentials of Strength Training and Conditioning (3rd edition)*. Human Kinetics, Champaign, 2008.

ISBN-13: 978-0-7360-5803-2

#### **CLASS POLICIES:**

- ✓ Attendance is required for success in this class. The student is responsible for any information presented, discussed and assigned in class regardless of whether or not the student is present. Make-up tests, quizzes, assignments, or other grades will be granted for excused absences only:
- serious illness (doctor's note required)
- official university excused absences (with proper documentation and prior notification)
- extenuating circumstances (PRIOR approval should be obtained or direct contact made with the instructor at least 24 hours of the event)
- Please be aware that any student who does not attend the lecture during the initial drop/add phase and has not communicated with me is subject to being administratively dropped from the roster. Roll will be taken up until the last day to add a class only and will not be used in grade calculation.
- ✓ When contacting the instructor(s) in reference to class issues via e-mail (best way to communicate with me is through GMU email) or other method (for example a note in my mail box or on my office door), if you do not receive confirmation that I have received your message, project, etc., within a reasonable time period (2 work days), then I did not get it! In other words, if you do not hear back from me, please follow up to make sure we are communicating effectively!
- ✓ Please check Blackboard e-mail account prior to coming to class and on a regular basis. If I am ill or there is a change in the class location, materials required, or meeting time, I will send an e-mail out via blackboard to all of your Mason student accounts. Blackboard is also a good way to track your progress during the semester, which I encourage you do.
- ✓ Students are always encouraged to come to office hours in order to ask additional questions on the material or to just check-in about anything.
- ✓ All students are expected to conduct their work for this class as spelled out in the George Mason University Honor Code. All class projects are subject to evaluation under plagiarism detection software such as "Turn It In" or "SafeAssign".
- ✓ Student employment does not take priority over academic obligations. I recognize that many students need to work in order to meet living expenses, however, there are distinct guidelines for students in terms of the number of credit hours which should be attempted based on how many hours per week a student has outside employment. For additional information on this subject, please see the GMU student handbook.
- ✓ 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 lecture or lab sections. If the professor/instructor identifies any student using a sound emitting technology in any fashion (e.g., text message, phone calls, instant messaging services, or others) the student will be requested to leave the classroom, and it will count as an absence.
- ✓ Additionally, no laptop computers (e.g., netbooks, notebooks, etc.) will be permitted for use during class time; the only exception is for use during presentations and projects and only with instruction permission.

#### **EVALUATION**

Assignments/Labs (3 @ 20)		60 pts
Unannounced Quizzes		60 pts
Mid-Term		100 pts
Final Exam		100 pts
	Total	320pts

# **Grading Scale**

A+ = 98 - 100	B+	= 88 - 89	C+ = 78 - 79	D	= 60 - 69
A = 94 - 97	В	= 84 - 87	C = 74 - 77	F	= 0 - 59
A - = 90 - 93	B-	= 80 - 83	C - = 70 - 73		

# TENTATIVE COURSE SCHEDULE

Classes	TOPIC	ASSIGNMENTS
1/ 24 - Tues	Introduction to KINE 360	
1/ 26 - Thurs	Neuromuscular System	Chapter 1
1/31 - Tues	Neuromuscular System	Chapter 1
2/2 - Thurs.	Bioenergetics	Chapter 2
2/7 - Tues	Bioenergetics	Chapter 2
2/9 - Thurs	Endocrine Responses	Chapter 3
2/14 - Tues	Endocrine Responses	Chapter 3
2/16 - Thurs	Warm-up and Stretching	Chapter 13
2/21 - Tues	Biomechanics	Chapter 4
2/23 - Thurs	Nutrition	Chapter 9 & 10
2/28 - Tues	Adaptations to Anaerobic Training	Chapter 5
3/1 - Thurs	Adaptations to Aerobic Training	Chapter 6
3/6 - Tues	Exam	
3/8 - Thurs	Exercise and Spotting Techniques	Chapter 14
3/13 - Tues	Spring Break	
3/15 - Thurs	Spring Break	
3/20 - Tues	Age and Gender Differences	Chapter 7
3/22 - Thurs	Needs Analysis and Test Selection	Chapter 11 & 12
3/27 - Tues	Test Administation and Intepretation	Chapter 11 & 12
3/ 29 - Thurs	Resistance Training	Chapter 15
4/3 - Tues	Resistance Training	Chapter 15
4/5 - Thur	Plyometric Training	Chapter 16

4/10 - Tues	Plyometric Training	Chapter 16
4/12 - Thur	Speed and Agility Training	Chapter 17
4/17 - Tues	Speed and Agility Training	Chapter 17
4/19 - Thurs	Endurance Training	Chapter 18
4/24 - Tues	Periodization	Chapter 19
4/26 - Thurs	Periodization	Chapter 19
5/1 - Tues	Program Design	
5/3 - Thurs	Maintaining and peaking performance	
5/8 - Tues	Review	
	Final Exam TBA	

Faculty reserves the right to alter the schedule as necessary.

### Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <a href="http://academicintegrity.gmu.edu/honorcode/">http://academicintegrity.gmu.edu/honorcode/</a>].
- 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, at the beginning of the semester [See http://ods.gmu.edu/].
- Students must follow the university policy for Responsible Use of Computing [See <a href="http://universitypolicy.gmu.edu/1301gen.html">http://universitypolicy.gmu.edu/1301gen.html</a>].
- 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.
- Students are expected to exhibit professional behaviors and dispositions at all times.

# 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 <a href="http://caps.gmu.edu/">http://caps.gmu.edu/</a>].
- 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 <a href="http://writingcenter.gmu.edu/">http://writingcenter.gmu.edu/</a>].
- For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See <a href="http://rht.gmu.edu">http://rht.gmu.edu</a>].

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.