

GEORGE MASON UNIVERSITY
School of Recreation, Health, and Tourism
Division of Health and Human Performance

KINE 360 – 001: Strength Training: Concepts & Applications (3)
Spring 2014

DAY/TIME:	T/Th 12:00 – 1:15 pm	LOCATION:	PW 247 Bull Run Hall
PROFESSOR:	Adam Ayash, MS, CSCS	EMAIL ADDRESS:	aayash@masonlive.gmu.edu
OFFICE LOCATION:	TBA	OFFICE HOURS:	M 11:00 – 12:00pm, or by appointment

PREREQUISITES:

BIOL 124, BIOL 125, ATEP 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 clients.

COURSE OBJECTIVES:

Upon completion of KINE 360, competency should be demonstrated in the following areas:

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 with handouts posted on BLACKBOARD in advance of class meetings.

- Attendance - Students are expected to attend class. A grade of zero will be assigned to any missed assignment without prior permission from the instructor. Late assignments will receive a letter grade deduction for each 24 hr period past the deadline. Attendance is required at laboratory sessions.

- Classroom Demeanor - Students are expected to attend all class sections, *participate in class discussions*, complete in-class exercises, and fulfill all assignments. Anyone exhibiting inappropriate behavior may be asked to leave (e.g. sleeping in class, texting). University policy states that all sound emitting devices shall be turned off during class unless otherwise authorized.
- Academic Honesty - Students are held to the standards of the George Mason University Honor Code. Students are expected to honestly represent their work. The possible situations when a student could violate these expectations range from incorrectly citing or failing to cite references/footnotes within papers and projects to cheating on an examination or assignment. Academic integrity is the responsibility a student assumes for honestly representing all academic work. This includes but is not limited to quizzes, examinations, projects, and other forms of oral and written endeavors.
- Accommodation Planning - Students with disabilities who seek accommodations in a course must be registered with the Office of Disability Services (ODS) and inform the instructor, in writing, at the beginning of the semester [See ods.gmu.edu]

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

EVALUATION:

This course will be graded on a point system, with a total of 100 possible points.

A. Written Examinations	
Unit Exam #1	30% (Objectives 1,2)
Unit Exam #2 (Final Exam)	30% (Objectives 3,4,5)
B. Participation	10% (Objectives 1-5)
C. Laboratory sessions (4)	10% (Objectives 1-5)
D. Final Project	20% (Objectives 1-5)

FINAL EXAM:

10:30am – 1:15 pm, Thursday, May 8, 2014 (bring scantron sheet)

Grading Scale

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

Tentative Course Schedule

DATE			TOPIC	READINGS/ASSIGNMENT DUE
T	January	21	Course Introduction	Syllabus Review
Th		23	Neuromuscular System	B&E: CH 1
T		28	NM System, Bioenergetics	B&E: CH 1, 2
Th		30	Bioenergetics + Lab 1 Preview	B&E: CH 2
T	February	4	Lab 1 Warm-Up & Soft Tissue Work	Dress Appropriately
Th		6	Endocrine Responses	B&E: CH 3
T		11	Truth About Exercise Documentary!	B&E: CH 3
Th		13	Biomechanics	B&E: CH 4
T		18	Biomechanics	B&E: CH 4
Th		20	Anaerobic Training Adaptations	B&E: CH 5
T		25	Anaerobic Training Adaptations + Lab 2 Preview	B&E: CH 5
Th		27	Lab 2 Squat & DL variations	Dress Appropriately
T	March	4	Age & Gender Differences + Midterm Review	B&E: CH 7
Th		6	Midterm Exam	Bring Scantron
T		11	No Class Spring Break!	
Th		13	No Class Spring Break!	
T		18	Testing & Evaluation	B&E: CH 11, 12
Th		20	Testing & Evaluation	B&E: CH 11, 12
T		25	Building a S&C Program + Resistance Training	B&E: CH 14, 15
Th		27	Resistance Training Technique	B&E: CH 14, 15
T	April	1	Plyometrics	B&E: CH 16
Th		3	Lab 3 Speed, Power & Plyometrics	Dress Appropriately
T		8	Speed Development	B&E: CH 17
Th		10	Periodization	B&E: CH 19
T		15	Kettlebell Training + Lab 4 Preview	Bboard Articles; Lab 4 Handout
Th		17	Lab 4 Kettlebell Training	Dress Appropriately
T		22	Periodization	B&E: CH 19
Th		24	Periodization + Final Review	
T		29	Final Project Presentations	Dress Business casual
Th	May	1	Final Project Presentations	Dress Business casual
T		6	No Class Reading Day!	Study Final Exam
Th		8	Final Exam 10:30am – 1:15pm	Bring scantron sheet/calculator

Note: Faculty reserves the right to alter the schedule as necessary. Guest Speaker dates TBD!

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://oai.gmu.edu/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, at the beginning of the semester [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.

