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

PHED 300 Kinesiology (3) Spring 2010

DAY/TIME: <mark>PROFESSOR</mark> :	M,W 10:30-11:45 Dr. Jennifer Guyton	LOCATION: EMAIL ADDRESS: PHONE NUMBER:	PW-OB 318 Jguyton2@gmu.edu 508-801-2575
OFFICE HOURS: TA's:	By appointment Brian Wright and Ashley Ausborn		500 001 2575

PREREQUISITES Pre-requisite: BIOL124 Co-requisite: BIOL 125

#### COURSE DESCRIPTION

This course will increase student knowledge and exposure to the structural and functional components of human anatomy including musculoskeletal origins, insertions, actions and innervations. On a live model, students will locate and identify anatomical landmarks, surface markings and soft tissue structures by palpation. Functional movements in various sport activities will be investigated to classify and identify musculature necessary to create the motions. Emphasis will be placed on normal walking and running gait, posture, throwing, kicking and jumping.

#### COURSE OBJECTIVES

At the completion of the course students should be able to:

- 1. Identify terminology related to the biomechanics
- 2. Describe linear, angular, and other forms of motion used in sports
- 3. Describe types of mechanical loads that act on the human body
- 4. Describe the effects of mechanical loads on bones
- 5. Describe human skeletal articulations in relation the their movement capabilities
- 6. Describe the relationship of the musculotendinous unit to muscle function
- 7. Identify muscle function in producing upper and lower extremity movements
- 8. Identify muscle function in producing movements of the spine
- 9. Describe kinematic and kinetic variables of human movement
- 10. Describe the stability of a body in relation to mechanical factors

11. Identify anatomical landmarks, surface markings, and various soft tissue structures by palpating a live model

# **REQUIRED READINGS**

- 1) Floyd, R.T. (2008). Manual of Structural Kinesiology, 17th edition. McGraw Hill
- 2) Biel, A. (2010). Trail Guide of the Body, 4<sup>th</sup> edition. Books of Discovery
- 3) Biel, A. (2010). Trail Guide to the Body Student Workbook, 4<sup>th</sup> edition. Books of Discovery

#### COURSE OVERVIEW

This course will be taught in the Athletic Training Clinical Simulation Laboratory and will include lecture and laboratory instruction.

#### Attendance

Students are expected to be on time, attend all class meetings and be prepared for in class assignments and projects. Excused absences include the following: illness (must bring a receipt or note from a doctor), family death, athletic/academic event, and others at the discretion of the instructor. For known upcoming absences, students must contact the instructor at least one week in advance tot the missed class to make up work. In the case of illness or some other unforeseen absence, the student must contact the instructor via e-mail or telephone. At the next attended class meeting the student will discuss material that is to be completed. Students will have one week from the excused absence to complete any missed assignments. It is the student's obligation to make up the work.

#### **Class Participation**

If you don't attend class you can't complete activities. Just being present in class doesn't mean you are an active and engaged participant in activities taking place that day. Be an active participant in all activities. You can only make up an in-class activity if you have pre-approved absence or proof of illness.

#### Dress

During the laboratory section of the course, students will be asked to wear appropriate clothing to expose various body parts for the purposes of practicing the application of various palpation skills. Tank tops and sports bras/bathing suit tops will be required when topics focus on the upper body. Shorts will be required when topics focus on the lower body.

#### Technology use during class

As per GMU policy, all sound emitting technology is required to be turned off during the class meeting time. Additionally, no laptop computers will be permitted for use during class time; the only exception is for use during presentations and projects. Students utilizing various technology devices during class will be asked to leave class and will not be permitted to complete the course work for that day.

#### E-mail correspondence

Only messages that originate from a George Mason University address will be accepted. Please use an appropriate and professional format for all emails.

# **EVALUATION**

## Examinations

A total of 16 examinations will be administered. The format of these examinations may be multiple choice, true/false, short answer, matching, fill in the blank, and/or essay type questions. Examinations will come in two forms (15 quizzes, 3 in class written examinations, 3 laboratory palpation examinations). You are to bring a Scantron sheet to each written examination and quiz. If you do not have a Scantron sheet you will not be permitted to take the assessment.

-Quizzes: Each of the quizzes will test material covered in the assigned reading for the upcoming class. Refer to the course calendar for exact dates and reading that will be required for the quizzes.

-Written Examinations: Written examinations may cover material in the required textbooks, class notes and activities completed during class sessions

-Palpation Examinations: Palpation examinations may cover all structural anatomy instructed during class and from the required reading. The final palpation examination will be cumulative and cover all course material.

**Class Activities and Assignments** 

A total of 25 activities and assignments will be assigned. Some assignments will be completed in class and others will be due at the beginning of class. Student workbook assignments are listed on the syllabus and will be submitted at the beginning of the class

Evaluation type	Number	Points each	Total points
Class participation	15	2	30
Student work book assignments	8	5	40
Quizzes	13	10	130
Written exams	3	50	150
Palpation exams	3	50	150
			TOTAL POINTS 500

#### **Grading Scale**

The student's final letter grade will be earned based on the following scale

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

# Extra Credit

Two opportunities for extra credit will be available during the semester:

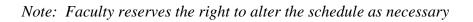
1) Prince William Health Expo: 10 points for 3 hours of volunteering

2) Kyle Wilson Walk for Fitness, April 16<sup>th</sup> 15 points for participating in the walk

# PHED 300 TENTATIVE SCHEDULE F= Floyd manual of Structural Kinesiology TG= Trail Guide to the Body SWB= Trail Guide to the Body Student Workbook (due at the beginning of class)

	DATE		ΤΟΡΙC	<b>READINGS/ASSIGNMENT</b> <b>DUE</b>	QUIZ
М	January	24	Introduction to the course and the study of Kinesiology		
W	January	26	Anatomical direction terminology, Body	F pg. 1-8	
			regions, Planes, Axes	TG pg. 20-22	
				SWB bring to class	
М	January	31	Skeletal system,	F pg. 9-14	YES
			Bone/type/features/markings	TG pg 32-33	
				SWB Bring to class	
W	February	2	Joint types, movements, motion and	F pg 15-20	YES
	-		terminology	TG pg 34	
				SWB Bring to class	
Μ	February	7	Muscle names, contractions and roles	F pg 35-47	YES
				TG pg 35-37	
W	February	9	Neuromuscular system,	F pg 47-60	YES
			dermatome/myotome	TG pg 42	
				SWB Bring to class	
Μ	February	14	Basic Biomechanics: Levers/Wheels/Axles	F pg 69-84	YES
			Friction/balance/loading/Laws of Motion		
W	February	16	WRITTEN EXAMINATION #1		
Μ	February	21	Shoulder girdle; Palpation Intro	F pg 87-102	YES
				TG 1-18, 46-50,61-62,65-66	
W	February	23	Palpation Intro	TG pg 46-59,68-70,82- 88,102	
				SWB pg 1-2, 5, 25-26, 28- 30, 32	
Μ	February	28	Shoulder Joint	F pg 109-133	YES
	-			TG pg 46,48-50,61-	
				65,100,102-103	
W	March	2	Shoulder Joint Palpation	TG pg 46-51, 59-60, 67-68,	
• •	A. AVI		Shower come any man	71-81, 89-94, 99, 104-106,	
				274	
				SWB pg 27,31, 33-50	
Μ	March	7	Elbow: Radioulnar joint	F pg 141-160	YES
			-	TG pg 108, 110-112	

W	March	9	Elbow: Radioulnar joint palpation	TG : 95-98, 106, 108,113- 118, 127-130, 132-133, 147- 148, 160-162 SWB pg 52-55	
	March	14- 20	SPRING BREAK		
M	March	20	Wrist and Hand	F pg 167-199 TG pg 108, 110-112, 116- 120, 127-131, 149	YES
W	March	23	Wrist and hand palpation	TG 109, 116, 118-126, 134- 166 SWB pg 56-82	
Μ	March	28	EXAM REVIEW		
W	March	30	WRITTEN EXAM #2 PALPATION EXAM #1		
M	April	4	Pelvis and Hip joint	F pg 227-264 296-304 TG pg 276-283	YES
W	April	6	Pelvis and Hip joint palpation	TG 284-295, 315-342 SWB pg 143-159	
M	April	11	Thigh and Knee	F pg 271-285 TG pg 305, 344-345, 347- 348, 392	YES
W	April	13	Thigh and Knee Palpation	TG : 306-314, 350-353, 394- 397 SWB pg 160-177	
М	April	18	Lower leg, ankle and foot	F pg 291-321, 354-355, 366- 370	YES
W	April	20	Lower leg, ankle and foot palpation	TG 246 TG pg 356-365, 371-391, 398-405 SWP pg 170-208	
M	April	25	Trunk and spinal column	SWB pg 179-208   F pg 327-354   TG 168, 170-174, 188-195, 240-243	YES
W	April	27	Trunk and spinal column palpation	TG pg 169, 175-187, 196- 223, 244-249	
M	May	2	EXAM REVIEW	SWB pg 85-117	
W	May	4	WRITTEN EXAM #3		
,,,	11203		PALPATION EXAM #2		
	May	11	COMPREHENSIVE PALPATION EXAM #3 10:30-1:15		



## 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 <a href="http://ods.gmu.edu/">http://ods.gmu.edu/</a>].
- 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>].

