## GEORGE MASON UNIVERSITY School of Recreation, Health and Tourism Spring 2011 PHED 300 Section 002 Kinesiology (3)

DAY/TIME:	TR 9-10:30ам	LOCATION:	BRH 148
<b>PROFESSOR:</b>	Dr. Sarah Shultz, ATC	<b>EMAIL ADDRESS:</b>	sshultz@gmu.edu
<b>OFFICE LOCATION:</b>	By appointment	<b>PHONE NUMBER:</b>	703-993-2060
<b>OFFICE HOURS:</b>	TR 12-1:30PM Other times by appt.	FAX NUMBER:	703-993-2025
DEPT. WEBSITE:	rht.gmu.edu	CLASS WEBSITE:	courses.gmu.edu

## **PRE/CO-REQUISITES**

Pre-requisite: BIOL 124 Co-requisite: BIOL 125

## **COURSE DESCRIPTION**

Covers anatomical and mechanical study of human movement.

#### **COURSE OBJECTIVES**

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

- 1. Identify terminology related to 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 to 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, 17<sup>th</sup> edition. McGraw Hill.
- 2) Biel, A. (2010). Trail Guide to 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, activities, laboratories 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 to the missed class to make up work. In the case of excused illness or some other unforeseen excused 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 pursue any make-up work.

## **Class Participation**

If you do not attend class you cannot complete activities. Just being present in class does not 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 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 course work for that day.

#### **E-mail Correspondence**

Only messages that originate from a George Mason University address will be accepted. The following is an appropriate professional format:

Dear Dr. Shultz (Salutation)

I am looking forward to your class. (Text body)

Regards, (Closing)

Dr. Shultz (Your name)

# **EVALUATION**

#### Examinations

The format of the written examinations may be multiple choice, true/false, short answer, matching, fill in the blank, and/or essay type questions. Palpation examinations will cover content from the laboratories and will require students to locate various anatomical structures on a model. The student is to bring a Scantron sheet to each written examination and quiz. If the student does not have a Scantron sheet the student 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 & Assignments**

In-class activities will be assigned during the class meeting and due at the end of the course meeting. Student work book assignments are listed on the syllabus and will be submitted at the beginning of the corresponding class meeting time. **NO late assignments will be accepted!** 

<b>Evaluation Type</b>	Number	<b>Points each</b>	Total points	
In-class Activities	15	2		30
Student Work Book Assignments	8	5		40
Quizzes	15	10		150
Written exams	3	50		150
Palpation exams	3	50		150
			TOTAL POINTS	520

## **Grading Scale**

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

A: 483 – 520 pts. (93%)	C+: 400 – 415.99 pts. (77%)
A-: 468 – 482.99 pts. (90%)	C: 379 – 399.99 pts. (73%)
B+: 452 – 467.99 pts. (87%)	C-: 364 – 378.99 pts. (70%)
B: 431 – 451.99 pts. (83%)	D: 327 – 363.99 pts. (63%)
B-: 416 – 430.99 pts. (80%)	F: < 326.99

# Extra Credit

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

Prince William Health Expo, Date TBA: 2 points for each hour of volunteering for a total of 10 points/5 hours

-You must sign in and out with the event leader to receive credit. Report involvement to the course instructor.

Kyle Wilson Walk for Fitness, April 16th: 2 points for each hour of volunteering for a total of 10 points/5 hours

-Sign up on Dr. Mrs. Caswell's door or in class for opportunities. On the day of the event, sign in with Dr. Mrs. Caswell or Dr. Ambegaonkar for proof of participation.

DAY	DATE	TENTATIVE TOPIC	READING ASSIGNMENT	QUIZ
1	1-24	Introduction to course and the Study of Kinesiology, (Review)		
2 1-26	1-26	Anatomical direction terminology, Body	<b>F:</b> pg1-8	Yes
	regions, Planes, Axes	<b>TG:</b> pg 20-22		
			SWB: Bring To Class	
3	1-31	Skeletal system, Bone type/features/markings	<b>F:</b> pg 9-18	Yes
		skeletal system, bone type reatures markings	<b>TG:</b> pg 32-33	
			SWB: Bring To Class	
4	2-2	Joint types & movements	<b>F:</b> pg 15-20	Yes
			<b>TG:</b> pg 34	
			SWB: Bring To Class	
5	2-3	Joint motion & terminology	<b>F:</b> pg 20-26	Yes
			<b>TG:</b> pg 23-31	
			<b>SWB:</b> Bring To Class	
6	2-7	Muscle names, contractions, roles	<b>F:</b> pg 35-47	Yes
			<b>TG:</b> pg 35-37	
7	2-9	9 Neuromuscular system, dermatome/myotome	<b>F:</b> pg 47-60	Yes
			<b>TG:</b> pg 42	
			<b>SWB:</b> Bring To Class	
8	2-14	Basic Biomechanics: Levers/Wheels/Axles Friction/balance/loading/ Laws of motion	<b>F:</b> pg 69-68, 79-84	Yes
9	2-16	Written Examination #1		
10	2-21	Shoulder girdle; Palpation Intro	<b>F:</b> pg 87-102	Yes
			<b>TG:</b> 1-18, 46-50, 61-62, 65-66	
11	2-23	Palpation Intro and Shoulder Girdle	<b>TG:</b> pg 46-59, 68-70, 82-88, 102	
			<b>SWB:</b> pg 1-2, 5, 25-26, 28-30, 32	
12	2-28		<b>F:</b> pg 109-133	Yes
		Shoulder joint	<b>TG</b> :pg 46, 48-50, 61-65, 100, 102- 103	
13 3-2	3-2	Shoulder Joint Palpation	<b>TG:</b> pg 46-51, 59-60, 67-68, 71-81, 89-94, 99, 104-106, 274	
			<b>SWB:</b> pg 27, 31, 33-50	
14	3-7	Elbow: Radioulnar joint	<b>F:</b> pg 141-160	Yes
		Libow. Radiouniai joint	<b>TG:</b> pg 108, 110-112	
15	3-9	Elbow: Radioulnar joint Palpation	<b>TG:</b> pg 95-98, 106, 108, 113-118, 127-130, 132-133, 147-148, 160-162	
			<b>SWB:</b> pg 52-55	
	14 - 20	SPRING BREAK		

# PHED 300 TENTATIVE COURSE SCHEDULE Faculty reserves the right to alter the schedule.

16	3-21	Wrist, and Hand	<b>F:</b> pg 167-199	Yes	
			<b>TG:</b> pg 116-119, 108, 110-112, 119-120, 127-131, 149		
17	3-23	Wrist, and Hand Palpation	<b>TG:</b> pg 109, 116, 118-126, 134- 166		
			<b>SWB:</b> pg 56-82		
18	3-28	Exam Review			
19	3-30	Written Exam#2 & Palpation Exam #1			
20	4-4	Pelvis and Hip Joint	<b>F:</b> pg 227-264 , 296-304	Yes	
			<b>TG:</b> pg 276-283,		
21	4-6	Pelvis and Hip Joint Palpation	<b>TG:</b> pg 284-295, 315-342		
			<b>SWB:</b> 143-159		
22	4-11	Thigh and Knee	<b>F</b> :pg 271-285	Yes	
			<b>TG:</b> pg 305, 344-345, 347-348, 392-392		
23	4-13	Thigh and Knee Palnation	<b>TG:</b> pg 306-314, 350-353, 394-397		
	Thigh and Knee Palpation	<b>SWB:</b> pg 160-177			
24	4-18	Lower Leg, Ankle and Foot	<b>F:</b> pg 291-321, 354-355, 366-370 <b>TG:</b> pg 246	Yes	
25	4-20	Lower Leg, Ankle and Foot Palpation Lab	<b>TG:</b> pg 356-365, 371-391, 398-405		
			<b>SWB:</b> pg 179-208		
26	4-25		<b>F:</b> pg 327-354	Yes	
		Trunk & Spinal Column	<b>TG:</b> pg 168, 170-174, 188-195, 240-243		
27 4-27	1-27 Trunk & Spinal Column Palpation	<b>TG:</b> pg 169, 175-187, 196-223,			
		Trunk & Spinar Column Talpation	244-249 SWB: pg 85-117		
28	5-2	Exam Review			
29	5-4				
30	5-16	Written Exam #3 & Palpation Exam #2Comprehensive Palpation Exam #3 7:30am-	10:15am		
		Comprehensive Lagation Examines 7.50um		alaar	
			<ul><li>F: Floyd. Manual of Structural Kinesiology</li><li>TG: Trail Guide to the Body</li></ul>		
		SWB: Trail Guide to the Body Student Workbook			
(due at the beginning of class)					

## **Blackboard E-mail Forwarding Directions**

- 1. Logging in to Blackboard at course.gmu.edu
- 2. Select "My Settings" in the upper right hand corner
- 3. Click My Tool Options.
- 4. Under Mail:
  - Specify whether to forward copies of all incoming course messages to the external e-mail address in your profile by selecting Forward all mail messages to the e-mail address in my profile. Messages will appear in both the Mail tool and the external e-mail account. However, if you want to respond to the message, you must open it from within the Mail tool.

\*Depending on administrator settings, mail forwarding may not be available in some courses. \*A valid e-mail address must be specified in your profile for this setting to take effect.

#### COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT

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 <u>http://universitypolicy.gmu.edu/1301gen.html</u>].
- 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>].

#### School of Recreation, Health, and Tourism

• 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>].

## Student Acknowledgement of Syllabus

(Print First and Last Name), by signing below, attest to the following:

\*I have read the course syllabus for PHED 300 in its entirety, and I understand the policies contained therein. This syllabus serves as a binding contract for PHED 300 between me and the instructor.

\*I have a clear understanding of the due dates for assignments and examinations, and I accept responsibility for the material.

\*I am aware that failure to submit assignments by the dates assigned will result in no points awarded as late work will not be accepted.

\*I understand the instructor reserves the right to alter the provided schedules as necessary and I am responsible for the assignments and examination dates for the most current version of the syllabus schedule.

\*I accept responsibility for reading announcements that are sent to me via e-mail through Blackboard; it is my responsibility to access my Blackboard e-mail for messages, or forward Blackboard e-mail as per the directions provided in the syllabus.

(Signature)

I. \_\_\_\_

(Date)

(Student Copy: This copy should remain attached to your syllabus)

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(Signature)

(Date)

(Instructor Copy: Submit to the instructor at the end of the first class meeting)