

GEORGE MASON UNIVERSITY
School of Recreation, Health and Tourism
Fall 2010
PHED 300 Kinesiology

DAY/TIME:	M/W 9:00-10:15AM	LOCATION:	ATEP Lab- OB 318
PROFESSOR:	Ashley Harper	EMAIL ADDRESS:	Aharper4@gmu.edu
OFFICE LOCATION:	BRH 208D	PHONE NUMBER:	703-401-2575
OFFICE HOURS:	<i>Determined by appointment.</i>	FAX NUMBER:	703-993-2025
DEPT. WEBSITE:	rht.gmu.edu	CLASS WEBSITE:	gmu.blackboard.com

PRE/CO-REQUISITES

Pre-requisite: BIOL 124

Co-requisite: BIOL 125

COURSE DESCRIPTION

Increase students 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 places on normal walking and running gait, posture, throwing, kicking and jumping.

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, 17th edition. McGraw Hill.
- 2) Biel, A. (2006). Trail Guide to the Body, 3rd 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 to 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 before the class meeting begins. At the next attended class meeting the student will discuss material that is to be completed. The student will have one week from the time of the next attended class to complete any make up work. It is the student's obligation to pursue any make-up work.

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.

EVALUATION

Examinations

A total of 6 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 (3 in class written examinations, 2 laboratory palpation examinations and a final exam consisting of written and palpation).

-Quizzes may test material covered in the assigned reading for the upcoming class, information from a previous lecture, or material from a palpation lab.

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

-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 Presentations

Each student will be assigned a muscle or group of muscles for each structural unit. At the conclusion of the formal lecture the class will break into groups and each student will be responsible to present their assigned muscle to their group. There will be 7 presentations total and they will be graded by the instructor and group members. The presentations will be about 5-10 minutes in length and must include the following information: *origin, insertion, action, stretching, strengthening, and an interesting way to remember this information*. The presentations will not only be graded on content but on creativity and the ability to help your group learn the information for each muscle. Examples will be given in class.

Description	Due Date	Points
Shoulder joint	10-6	15
Elbow: radioulnar joint	10-13	15
Forearm, wrist, and hand	10-18	15
Pelvis and hip	10-27	15
Thigh and knee	11-3	15
Lower leg, ankle, and foot	11-10	15
Trunk and spine	11-22	15
	TOTAL POINTS	105

Class Participation

If you don't attend class you can't 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. Believe it or not, they are learning activities.

Note: You can only make up an in-class activity if you have pre-approved absence or proof of illness.

Evaluation type	Number*	Points each*	Total points*
Class participation	25	2	50
Quizzes	9	5	45
Written exams	3	5	150
Palpations exams	2	50	100
Group presentations	7	15	105
Final Exam	1	50	(25palpation/25written) 50
TOTAL POINTS			500

**Class participation, quizzes, and exam point values may change from the original shown in the above table. This may be done at the discretion of the instructor according to the progress and instruction needed for the class.*

Grading Scale

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

A: 465 – 500 pts. (93%)	C+: 385 – 399 pts. (77%)
A-: 450 – 464 pts. (90%)	C: 365 – 384 pts. (73%)
B+: 435 – 449 pts. (87%)	C-: 350 – 364 pts. (70%)
B: 415 – 434 pts. (83%)	D: 315 – 349 pts. (63%)
B-: 400 – 414 pts. (80%)	F: < 315

TENTATIVE COURSE SCHEDULE

Note: Faculty reserves the right to alter the schedule as necessary

DAY	DATE	TENTATIVE TOPIC	READING ASSIGNMENT
1	8-30	Introduction to course and the Study of Kinesiology, (Review)	
2	9-1	Anatomical direction terminology, Body regions, Planes, Axes	F: pg1-8; TG: pg 31
3	9-8	Skeletal system, Bone type/features/markings	F: pg 9-14; TG: pg 40 -41
4	9-13	Joint types/movement/terminology	F: pg 15-26; TG: pg 32-39, 42
5	9-15	Muscle names, contractions, roles	F: pg 35-47; TG: pg 43-45
6	9-20	Neuromuscular system, dermatome/myotome	F: pg 47-60
7	9-22	Basic Biomechanics: Levers/Laws of motion	F: pg 69-80
8	9-27	Basic Biomechanics: Friction/balance/loading	F: pg 81-84
9	9-29	Written Examination #1	
10	10-4	Shoulder girdle	F: pg 87-102
11	10-6	Shoulder joint; Intro to palpations	F: pg 109-133 ; TG: pg 12-27
12 tues	10-12 *	Palpation Lab: Shoulder/ Scapula/ Upper Arm	TG: pg 54-108
13	10-13	Elbow: Radioulnar joint	F: pg 141-160
14	10-18	Forearm, Wrist, and Hand	F: pg 167-199
15	10-20	Palpation Lab: Forearm, Wrist, and Hand	TG: pg 116-166
16	10-25	Written Exam#2 & Palpation Exam #1	
17	10-27	Pelvis and Hip Joint	F: pg 227-264
18	11-1	Palpation Lab: Pelvis and Hip Joint	TG: pg 274-298, 309-312, 318-319, 322-336
19	11-3	Thigh and Knee	F: pg 271-285
20	11-8	Palpation Lab: Thigh and Knee	TG: pg 299-308, 313-316, 318-321, 338-347, 360-361, 382-387
21	11-10	The Lower Leg, Ankle and foot	F: pg 291-321
22	11-15	Palpation Lab: Lower Leg, Ankle and foot (gait analysis)	TG: pg 333-341, 348-359, 362-370
23	11-17	Palpation Lab: Lower Leg, Ankle and foot	TG: pg371-381, 388-394
24	11-22	Trunk & Spinal Column	F: pg 327-354
25	11-29	Palpation Lab: Trunk & Spinal Column	TG: pg 174-229
26	12-1	Palpation Lab: Trunk & Spinal Column	TG: pg 232-267
27	12-6	Written Exam #3 & Palpation Exam #2	
28	12-8	Palpation Lab	
29	12-20	Comprehensive Palpation Exam #3 (7:30-10:15am)	



- ❖ All students are held to the standards of the George Mason University Honor Code [See <http://www.gmu.edu/catalog/apolicies/#Anchor12>]
- ❖ University policy states that all sound emitting devices shall be turned off during class unless otherwise authorized by the professor
- ❖ Students with disabilities who seek accommodations in a course must be registered with the Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning of the semester [See www.gmu.edu/student/drc]
- ❖ For additional School of Recreation, Health, and Tourism information, please visit the website at <http://rht.gmu.edu>