

GEORGE MASON UNIVERSITY
School of Recreation, Health and Tourism
Summer 2011
KINE 300

DAY/TIME:	M-TH 9:30-11:45AM	LOCATION:	ATEP Lab- OB 318
PROFESSOR:	Shruti Ambegaonkar	EMAIL ADDRESS:	sambegao@gmu.edu
OFFICE LOCATION:	OB 228 A	PHONE NUMBER:	703-993-7156
OFFICE HOURS:	<i>Times 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

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 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 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.

Technology

Laptop computers are not permitted for use during the course. Cell phones are to be silenced and placed in a book bag; *anyone seen with a cell phone during class will be asked to leave class for the day and will not receive credit for participation.*

EVALUATION

Examinations

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 three forms (3 written examinations, 2 palpation tests).

-Written examinations may cover material in the required textbooks, class notes, and activities completed during class sessions. Examinations will be posted for 48 hours according to the course schedule.

-Palpation examinations may cover all structural anatomy instructed during class and from the required reading.

Class Participation

If you do not attend a class you cannot 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. Believe it or not, they are learning activities.

Notes:

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

****NO LATE WORK WILL BE ACCEPTED!**

Evaluation type	Number	Points each	Total points
Class participation			50
Written exams	3	50	150
Palpation exams	2	50	100
TOTAL POINTS			300

Grading Scale

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

A: 300 – 279 pts. (93%)	C+: 239 – 231 pts. (77%)
A-: 278 – 270 pts. (90%)	C: 230 – 219 pts. (73%)
B+: 269 – 261 pts. (87%)	C-: 218 – 210 pts. (70%)
B: 260 – 249 pts. (83%)	D: 200 – 189 pts. (63%)
B-: 248 – 240 pts. (80%)	F: < 189

TENTATIVE COURSE SCHEDULE *Note: Faculty reserves the right to alter the schedule as necessary*

DAY	CLASS	DATE	TENTATIVE TOPIC	READING ASSIGNMENT
M	1	5-23	Introduction to course and the Study of Kinesiology	
			Anatomical direction terminology, Body regions, Planes, Axes	
			Basic Biomechanics: Levers/Laws of motion	F:pg 69-84
T	2	5-24	Skeletal system, Bone type/features/markings	F:pg 1-26
			Joint types/movement/terminology	
W	3	5-25	Muscle names, contractions, roles	F:pg 35-61
			Neuromuscular system, dermatome/myotome	
T		5-31	NO CLASS	
			Written Examination #1	Posted 5-25, 2 pm to 6-1, 9:30am
W	4	6-1	Shoulder girdle/ Intro to palpations	F:pg 87-102
			Palpation Lab: Shoulder Girdle	
R	5	6-2	Shoulder joint	F:pg 109-133
			Palpation Lab: Shoulder Joint	
T	6	6-7	Elbow: Radioulnar joint	F:pg 141-160
			Palpation Lab: Radioulnar Joint/ Forearm, Wrist, and Hand	
W	7	6-8	Forearm, Wrist, and Hand	F:pg 167-199
			Palpation Lab: Review	
R		6-9	Written Exam#2 & Palpation Exam #1	Posted 6-8, 2 pm to 6-14, 9:30am
T	8	6-14	Pelvis and Hip Joint	F:pg 227-264
			Palpation Lab: Pelvis and Hip Joint	
W	9	6-15	Thigh and Knee	F:pg 271-285
			Palpation Lab: Thigh and Knee	
R	10	6-16	The Lower Leg, Ankle and foot	F:pg 291-321
			Palpation Lab: Lower Leg, Ankle and foot	
T	11	6-21	Trunk & Spinal Column	F:pg 327-354
			Palpation Lab: Trunk & Spinal Column	
R		6-23	Written Exam #3 Palpation Exam #2	Posted 6-21, 2 pm to 6-24, 9:30 am

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- 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/1301gen.html>].
- 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 <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>].