

GEORGE MASON UNIVERSITY
School of Recreation, Health and Tourism
Spring 2012
ATEP 300 Section 001 Functional Anatomy

DAY/TIME:	MW 9:00-10:15	LOCATION:	PW-OB 318
PROFESSOR:	Dr. Guyton	EMAIL ADDRESS:	Jguyton2@gmu.edu
OFFICE LOCATION:		PHONE NUMBER:	703-993-2060
OFFICE HOURS:	By appointment	FAX NUMBER:	703-993-2025
DEPT. WEBSITE:	rht.gmu.edu	CLASS WEBSITE:	https://mymasonportal.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. (2011). Manual of Structural Kinesiology, 18th edition. McGraw Hill.
- 2) Biel, A. (2010). Trail Guide to the Body, 4th Edition. Books of Discovery.
- 3) Biel, A. (2010). Trail Guide to the Body Student Workbook, 4th Edition. Books of Discovery.
- 4) Beil, A. (2010). Trail Guide to the Body: Flashcards 4th Edition Volume 1&2. Books of Discover

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. Guyton (*Salutation*)

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

Regards, (*Closing*)

Dr. Guyton (*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!**

Evaluation Type	Number	Points each	Total points
In-class Activities	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:

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

KINE 300 TENTATIVE COURSE SCHEDULE *Faculty reserves the right to alter the schedule.*

DAY	DATE	TENTATIVE TOPIC	READING ASSIGNMENT	QUIZ
1	8-27	Introduction to course and the Study of Kinesiology, (Review)		
2	8-29	Anatomical direction terminology, Body regions, Planes, Axes	F: pg1-7 TG: pg 20-22 SWB: Bring To Class	
	9-3	NO CLASS LABOR DAY		
3	9-5	Skeletal system, Bone type/features/markings, Joint Types	F: pg 7-18 TG: pg 32-34 SWB: Bring To Class	Yes #1
4	9-10	Joint motion , movements & terminology	F: pg 19-26 TG: pg 23-31 SWB: Bring To Class	Yes #2
5	9-12	Muscle names, contractions, roles	F: pg 35-47 TG: pg 35-37	Yes #3
6	9-17	Neuromuscular system, dermatome/myotome	F: pg 47-62 TG: pg 42 SWB: Bring To Class	Yes #4
7	9-19	Basic Biomechanics: Levers/Wheels/Axles Friction/balance/loading/ Laws of motion	F: pg 69-84	Yes #5
8	9-24	<i>Written Examination #1</i>		
9	9-26	Shoulder girdle; Palpation Intro	F: pg 87-102 TG: 1-18, 46-50, 61-62, 65-66	Yes #6
10	10-1	Palpation Intro and Shoulder Girdle	TG: pg 46-59, 68-70, 82-88, 102 SWB: pg 1-2, 5, 25-26, 28-30, 32	
11	10-3	Shoulder joint	F: pg 109-133 TG: pg 46, 48-50, 61-65, 100, 102-103	Yes #7
12	10-9**	Shoulder Joint Palpation	TG: pg 46-51, 59-60, 67-68, 71-81, 89-94, 99, 104-106, 274 SWB: pg 27, 31, 33-50	
13	10-10	Elbow: Radioulnar joint Elbow: Radioulnar joint Palpation	F: pg 141-160 TG: pg 108, 110-112 TG: pg 95-98, 106, 108, 113-118, 127-130, 132-133, 147-148, 160-162 SWB: pg 52-55	Yes #8
16	10-15	Wrist, and Hand	F: pg 167-199 TG: pg 116-119, 108, 110-112, 119-120, 127-131, 149	Yes #9
17	10-17	Wrist, and Hand Palpation	TG: pg 109, 116, 118-126, 134-	

			166 SWB: pg 56-82	
19	10-22	Written Exam#2		
	10-24	Palpation Exam #1		
20	10-29	Pelvis and Hip Joint	F: pg 227-264 TG: pg 276-283,	Yes #10
21	10-31	Pelvis and Hip Joint Palpation	TG: pg 284-295, 315-342 SWB: 143-159	
22	11-5	Thigh and Knee	F: pg 271-285 TG: pg 305, 344-345, 347-348, 392-392	Yes #11
23	11-7	Thigh and Knee Palpation	TG: pg 306-314, 350-353, 394-397 SWB: pg 160-177	
24	11-12	Lower Leg, Ankle and Foot	F: pg 291-321, TG: pg 246	Yes #12
25	11-14	Lower Leg, Ankle and Foot Palpation Lab	TG: pg 356-365, 371-391, 398-405 SWB: pg 179-208	
26	11-19	Trunk & Spinal Column	F: pg 327-354 TG: pg 168, 170-174, 188-195, 240-243	Yes #13
	11-21	NO CLASS THANKSGIVING BREAK		
27	11-26	Trunk & Spinal Column Palpation	TG: pg 169, 175-187, 196-223, 244-249 SWB: pg 85-117	
29	11-28	Written Exam #3		
	12-3	Palpation Exam #2		
30	12-5	Comprehensive Palpation Exam #3		
			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)	

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT

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/>].

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 <http://rht.gmu.edu>].

Student Acknowledgement of Syllabus

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

*I have read the course syllabus for KINE 300 in its entirety, and I understand the policies contained therein. This syllabus serves as a binding agreement for KINE 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)

(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)