# GEORGE MASON UNIVERSITY School of Recreation, Health, and Tourism Athletic Training Education Program

# ATEP 300 004 - Functional Anatomy Spring 2018 T/R 1:30 – 2:45 P.M. BULL RUN HALL 148

### **Faculty**

Name: Mr. Richard Shaw

Office hours: By appointment only Office location: Bull Run Hall 220A Office phone: (912) 541-7800 Email address: rshaw13@gmu.edu

### PREREQUISITES/COREQUISITES

BIOL 124 - Human Anatomy and Physiology (4cr)

BIOL 125 - Human Anatomy and Physiology (4cr)

### **COURSE DESCRIPTION:**

Increase students' knowledge and exposure to the structural and functional components of human anatomy including musculoskeletal origins, insertions, actions and innervations.

#### **COURSE OVERVIEW**

N/A

# **COURSE DELIVERY METHOD**

This course will be delivered in a face-to-face type of environment. The class will consist of both lecture and laboratory instruction with the use of live model situations. Lecture content will be available on-line to use to supplement assigned readings and student workbook assignments. Students are responsible for all material and are expected to come to class prepared to apply their knowledge.

### LEARNER OUTCOMES

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

#### PROFESSIONAL STANDARDS

The course meets Commission on Accreditation of Athletic Training Education (CAATE) competencies and proficiencies in one or more of the following content areas: evidence-based practice, prevention and health promotion, clinical examination and diagnosis, acute care of injury and illness, therapeutic interventions, psychosocial strategies and referral, healthcare administration, professional development and responsibility.

# **REQUIRED TEXTS**

- 1) Floyd, R.T. (2015). Manual of Structural Kinesiology, 20th edition. McGraw Hill.
- 2) Biel, A. (2014). Trail Guide to the Body, 5th Edition. Books of Discovery.
- 3) Biel, A. (2014). Trail Guide to the Body Student Workbook, 5<sup>th</sup> Edition. Books of Discovery.
- 4) Biel, A. (2010). Trail Guide to the Body Flashcards, 4<sup>th</sup> Edition. Books of Discovery. OR AnatomyMapp app from <a href="https://www.booksofDiscovery.com">www.booksofDiscovery.com</a>

### **COURSE PERFORMANCE EVALUATION**

Students will be evaluated on content standards (knowledge gained) and performance (demonstration of the content). Content standards will be assessed via written assignments, quizzes, and exams. Performance will be assessed through completion of class participation activities and competency testing.

### Assignments and Examinations

### Quizzes

As indicated on the Course Calendar, a quiz will be given at the beginning of class for the required reading. This will be a brief multiple choice and true-false assessment of your knowledge from the reading. You are required to bring a Scantron to each examination. If you are late to class, you cannot make up the quiz at the end of class.

### • Written Examinations

Four written examinations will be administered. The format of the examinations will be multiple choice, true/false, labeling, short answer, matching, and fill in the blank type questions. Each of the examinations will test material covered during the prior class meetings and previous reading assignments. Exams will also cover material in the textbook and activities completed during class sessions. You are required to bring a Scantron to each examination.

### • Palpation Examinations

Three assessments of palpation psychomotor skills will be administered throughout the semester. The skills practiced in class will be assessed in a live practical examination format. This is a real time examination that will require the student to locate various anatomical structures on a live model. Students will be randomly scheduled for testing.

# Student Work Book Assignments

Student workbook assignments are listed on the syllabus and will be submitted at the beginning of the corresponding class meeting time. You MUST follow the directions and complete all student work book requirements: if it says to color, label, etc. you must complete for credit. **NO late assignments will be accepted!** 

### OTHER REQUIREMENTS

### • 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 <u>preapproved</u> 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, iPads, E-Tablets, Pagers, etc will be permitted for use during class time; the exceptions are for use during presentations/projects, and technology deemed as necessary by the Office of Disability Services. Students utilizing various technology devices during class will be asked to leave class and will not be permitted to complete course work or receive any points for assignments that day.

### Academic Load

Although many students must work to meet living expenses, employment and personal responsibilities are not a consideration for missed classes, late or incomplete assignments, the course content, or the course schedule (see http://catalog.gmu.edu). Student employment does not take priority over academic obligations. It is recognized that many students need to work in order to meet living expenses, however, there are distinct guidelines for students in terms of the number of credit hours which should be attempted based on how many hours per week a student has outside employment. For additional information on the subject, please see the GMU Academic Catalog

(http://catalog.gmu.edu/content.php?catoid=17&navoid=1274#academicload). Students who fail to observe these guidelines may expect no special consideration for academic problems arising from the pressure of employment.

# • E-mail Correspondence

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

Dear Mr. Shaw, (Beginning salutation)

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

Regards, (Ending Salutation)

Richard Shaw (Your name)

### COURSE PERFORMANCE EVALUATION WEIGHTING

Evaluation Type	Number	Points each	Total points	
In-class Activities	5	5		25
Student Work Book Assignments	11	5		55
Quizzes	12	10	:	120
Written exams	3	50		150
Palpation exams	3	50	:	150
			TOTAL POINTS	500

### **GRADING POLICIES**

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

A: 465 – 500 pts. (93%)

A-: 450 - 464 pts. (90%)

B+: 435 – 449 pts. (87%)

B: 415 – 434 pts. (83%)

B-: 400 - 414 pts. (80%)

C+: 385 - 399 pts. (77%)

C: 365 – 384 pts. (73%)

C-: 350 - 364 pts. (70%)

D: 315 - 349 pts. (63%)

F: < 315

### Extra Credit

Opportunities for extra credit will be available during the semester: TBD

#### PROFESSIONAL DISPOSITIONS

Students are expected to exhibit professional behaviors and dispositions at all times.

See https://cehd.gmu.edu/students/polices-procedures/

### **CORE VALUES COMMITMENT**

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles.

### **GMU Policies and Resources for Students**

### **Policies**

- Students must adhere to the guidelines of the Mason Honor Code (see https://catalog.gmu.edu/policies/honor-code-system/).
- Students must follow the university policy for Responsible Use of Computing (see <a href="http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/">http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/</a>).
- Students are responsible for the content of university communications sent to their Mason 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 with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see http://ods.gmu.edu/).
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

# Campus Resources

- Support for submission of assignments to Tk20 should be directed to <a href="mailto:tk20help@gmu.edu">tk20help@gmu.edu</a> or <a href="https://cehd.gmu.edu/aero/tk20">https://cehd.gmu.edu/aero/tk20</a>. Questions or concerns regarding use of Blackboard should be directed to <a href="http://coursessupport.gmu.edu/">https://coursessupport.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>).
- 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 Office of Student Support staff helps students negotiate life situations by connecting them with appropriate campus and off-campus resources. Students in need of these services may contact the office by phone (703-993-5376). Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to <a href="http://studentsupport.gmu.edu/">http://studentsupport.gmu.edu/</a>, and the OSS staff will follow up with the student.
- For information on student support resources on campus, see <a href="https://ctfe.gmu.edu/teaching/student-support-resources-on-campus">https://ctfe.gmu.edu/teaching/student-support-resources-on-campus</a>.

For additional information on the College of Education and Human Development, please visit our website <a href="https://cehd.gmu.edu/students/">https://cehd.gmu.edu/students/</a>.

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

# TENTATIVE COURSE SCHEDULE

DATE	TENTATIVE TOPIC	READING ASSIGNMENT	QUIZ	ASSIGNMENT
8-28	Introduction to course and the Study of Kinesiology, (Review)			#1
8-30	Anatomical direction terminology, Body regions, Planes, Axes, Skeletal system, Bone type/features/markings	F: Chapter 1, pg1-15 TG:pg 20-22, 32-34 SWB#1: 6, 7, 8, 14, 15	#1	#2
9-4	Types of Joints, Joint motion, movements & terminology, movement icons, physiological movements vs accessory	F: Chapter 1, pg 16-27 TG:pg 23-31 SWB#2: 9, 10, 11, 12, 13	#2	#3
9-6	Muscle names, contractions, roles, determination of muscle action	<b>F</b> : Chapter 2, pg 35-48 <b>TG</b> :pg 35-37	#3	#4
9-11	Neuromuscular system, dermatome/myotome	F: Chapter 2, pg 48-63 TG:pg 42 SWB#3: 4, 16, 17, 18, 23	#4	#5
9-13	Written Examination #1			
9-18	Shoulder girdle; Palpation Intro Lecture	<b>F:</b> pg Chapter 4, 91-114 #5 <b>TG:</b> 1-18, 46-50, 61-62, 65-66		
9-20	Shoulder Girdle Palpation	TG:pg 46-59, 68-70, 82-88, 102 SWB#4:pg 1-2, 5, 25-26, 28-30, 32		
9-25	Shoulder Joint Lecture	F:pg Chapter 5, 115-148 TG:pg 46, 48-50, 61-65, 100, 102-103	#6	
9-27	Shoulder Joint Palpation	TG:pg 46-51, 59-60, 67-81, 89-94, 99, 104-106, 274 SWB#5:pg 27, 31, 33-50		
10-2	Elbow: Radioulnar Joint Lecture	F: Chapter 6, 149-176 #7 TG:pg 108, 110-112		
10-4	Elbow Joint Palpation	TG:pg 95-98, 106, 108, 113- 118, 127-130, 132-133, 147-148, 160-162 SWB#6:pg 52-55		
10-9	FLEX DAY (Optional Class)			
10-11	Wrist and Hand Joint lecture	<b>F:</b> Chapter 7, pg 177-218 # <b>8 TG:</b> pg 116-119, 108, 110- 112, 119-120, 127-131, 149		
10-16	Wrist and Hand Palpation	TG:pg 109, 116, 118-126, 134-166 SWB#7:pg 56-82		
10-18	Review For Test			

10-23	Written Exam #2			
10-25	Palpation Exam #1			
10-30	Pelvis and Hip Joint Lecture	<b>F:</b> Chapter 8, pg 219-264 <b>TG:</b> pg 276-283	#9	
11-1	Pelvis and Hip Joint Palpation	TG:pg 284-295, 315-342 SWB#8: 143-159		
11-6	Thigh and Knee Lecture	<b>F:</b> Chapter 9, pg 265-286 <b>TG:</b> pg 305, 344-345, 347-348, 392-392	#10	
11-8	Knee and Thigh Palpation	TG:pg 306-314, 350-353, 394-397 SWB#9: pg 160-177		
11-13	Lower Leg, Ankle and Foot Lecture	<b>F:</b> Chapter 10, pgs 287-328 <b>TG:</b> pg 246	#11	
11-15	Lower Leg, Ankle and Foot Palpation	TG:pg 356-365, 371-391, 398-405		
11-20	Trunk & Spinal Column Lecture	<b>SWB#10:</b> pg 179-208 <b>F:</b> Chapter 11, pg 329-366 <b>TG:</b> pg 168, 170-174, 188-195, 240-243	#12	
11-22	Thanksgiving Break (No Class)			
11/27	Trunk & Spinal Column Palpation	TG:pg 169, 175-187, 196- 223, 244-249 SWB#11: pg 85-117		
11/29	Review for Exam			
12/4	Written Exam #3			
12/6	Palpation Exam #2			
12-18	Final Exam – Comprehensive Palpation Exam #3  1:30 – 4:15 PM			
	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)			

# **Student Acknowledgement of Syllabus**

I,, by signing below, attest (Print First and Last Name)	to the following:
*I have read the course syllabus for ATEP 300 in its ent therein. This syllabus serves as a binding contract for ATI *I have a clear understanding of the due dates for a responsibility for the material.	EP 300 between me and the instructor.
*I am aware that failure to submit assignments by the date	es assigned will result in no points awarded as
late work will not be accepted. *I understand the instructor reserves the right to alter the	
responsible for the assignments and examination dates schedule.	for the most current version of the syllabus
*I accept responsibility for reading announcements that ar is my responsibility to access my Blackboard e-mail for n the directions provided in the syllabus.	<del>_</del>
(Signature)	(Date)
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*I accept responsibility for reading announcements that ar is my responsibility to access my Blackboard e-mail for n the directions provided in the syllabus.	
(Signature)	(Date)
(Instructor Copy: Submit to the instructor at the	end of the first class meeting)