George Mason University College of Education and Human Development Athletic Training Education Program

ATEP 300. 003– Functional Anatomy 3 Credits, Spring 2017 MW 9:00-10:15am Bull Run Hall 212 – Science and Technology Campus

Faculty

Name: Mariel Crawford Co-Instructor: Amanda Caswell Office Hours: By Appointment

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Prerequisites/Corequisites

Prerequisite: BIOL 124-Human Anatomy and Physiology (4cr) Corequisite: BIOL 125-Human Anatomy and Physiology (4cr)

University Catalog 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

Not Applicable

Course Delivery Method

This course will be delivered using a face to face type of environment. This class will consist of both lecture and laboratory instruction with the use of live model situations. All instructional materials will be posted online to the course in Blackboard.

Learner Outcomes or Objectives

This course is designed to enable students to do the following:

- 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. 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, 19th 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, 5th Edition. Books of Discovery.
- 4) Biel, A. (2010). Trail Guide to the Body Flashcards, 5th Edition. Books of Discovery. OR AnatomyMapp app from www.booksofDiscovery.com

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

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/or Examinations

• In-Class Activities

Students will turn in class activities for attendance and participation points. Each class activity is worth 5 points each. Students are only able to complete the activities if they are present in class.

• 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. If you are late to class, you *cannot* make up the quiz at the end of class.

• Written Examinations

Three written examinations will be administered. The format of the examinations will be multiple choice, true/false, 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.

• Palpation Examinations

Three assessments based on the palpation labs. There will be origins, insertions, muscle bellies and bony landmarks are covered. This is a timed assessment that is completed in real time on a live model.

• In-Class Activities & Student Work Book 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. You MUST follow the directions and complete all student workbook requirements: it is says to color, label, etc. for credit. Colored pencils or markers are needed. **NO late assignments will be accepted!**

Grading

Evaluation Type	Number	Points each	Total points
In-class Activities	5	5	25
Student Work Book	11	5	55
Assignments			
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 – 464.99 pts. (90%)

B+: 435 – 449.99 pts. (87%)

B: 415 – 434.99 pts. (83%)

B-: 400 – 414.99 pts. (80%)

C+: 385 – 399.99 pts. (77%)

C: 365 – 384.99 pts. (73%)

C-: 350 - 364.99 pts. (70%)

D: 315 - 349.99 pts. (63%)

F: < 315

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. It is critical each student conduct themselves in an appropriate manner and decorum fitting of a health care provider within and outside class. Making light of injuries, conditions, or illnesses that is not respectful to the class, instructor, or patient study will not be tolerated. Submission of documents or assignments should not include personal identifiable information and comply with Health Insurance Portability & Accountability Act (HIPPA) regulations.

Class Schedule

DATE	TENTATIVE TOPIC	READING ASSIGNMENT	QUIZ
1/23	Introduction to course and the Study of Kinesiology, (Review)		
1/25	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
1/30	Types of Joints, Joint motion, movements & terminology, movement icons, physiological movements vs accessory	F: Chapter 1, pg 15- 27 TG:pg 23-31 SWB#2: 9, 10, 11, 12, 13	#2
2/1	Muscle names, contractions, roles, determination of muscle action	F: Chapter 2, pg 35-48 TG:pg 35-37	#3
2/6	Neuromuscular system, dermatome/myotome	F: Chapter 2, pg 48-62 TG:pg 42 SWB#3: 4, 16, 17, 18, 23	#4
2/8	Written Examination #1		
2/13	Shoulder girdle; Palpation Intro Lecture	F:pg Chapter 4, 89- 104 TG: 1-18, 46-50, 61- 62, 65-66	#5
2/15	Shoulder Girdle Palpation	TG:pg 46-59, 68-70, 82-88, 102 SWB#4:pg 1-2, 5, 25- 26, 28-30, 32	
2/20	Shoulder Joint Lecture	F:pg Chapter 5, 111- 135 TG:pg 46, 48-50, 61- 65, 100, 102-103	#6

2/22	Shoulder Joint Palpation	TG:pg 46-51, 59-60, 67-81, 89-94, 99, 104-106, 274 SWB#5:pg 27, 31, 33-50			
2/27	Elbow: Radioulnar Joint Lecture	F: Chapter 6, 143-162 TG: pg 108, 110-112	#7		
3/6	Wrist and Hand joint lecture	F: Chapter 7, pg 169-201 TG:pg 116-119, 108, 110-112, 119-120, 127-131, 149	#8		
3/8	Elbow, Wrist and Hand Palpation	TG:pg 95-98, 106, 108, 113-118, 127- 130, 132-133, 147- 148, 160-162 TG:pg 109, 116, 118- 126, 134-166 SWB#6:pg 52-55 SWB#7:pg 56-82			
3/20	Review For Test				
3/22	Written Exam #2				
3/27	Palpation Exam #1				
3/29	Pelvis and Hip Joint Lecture	F: Chapter 9, pg 229- 266 TG:pg 276-283	#9		
4/3	Thigh and Knee Lecture	F: Chapter 10, pg 273-287 TG:pg 305, 344-345, 347-348, 392-392	#10		
4/5	Pelvis and Hip Joint Palpation Knee and Thigh Palpation	TG:pg 284-295, 315-342 SWB#8: 143-159			

		TG: pg 306-314, 350-353, 394-397	
		SWB#9: pg 160-177	
4/10	Lower Leg, Ankle and Foot Lecture	F: Chapter 11, pg 293-323 TG:pg 246	#11
4/12	Trunk & Spinal Column Lecture	F: Chapter 12, pg 329-356 TG: pg 168, 170-174, 188-195, 240-243	#12
4/17	Lower Leg, Ankle and Foot Palpation	TG:pg 356-365, 371-391, 398-405 SWB#10: pg 179-208	
4/19	Trunk & Spinal Column Palpation	TG:pg 169, 175-187, 196-223, 244-249 SWB#11: pg 85-117	
4/24	Review for Exam		
4/26	Written Exam #3		
5/1	Palpation Exam #2		
5/3	Final exam review		
5/15	Final Exam – Comprehensive Palpation Exam #3		
	7:30-10:15am		
	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)		

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

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: http://cehd.gmu.edu/values/.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see http://oai.gmu.edu/the-mason-honor-code/).
- Students must follow the university policy for Responsible Use of Computing (see http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).
- 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 tk20help@gmu.edu or https://cehd.gmu.edu/aero/tk20. Questions or concerns regarding use of Blackboard should be directed to http://coursessupport.gmu.edu/.
- The Writing Center 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/).
- The 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 Student Support & Advocacy Center staff helps students develop and maintain healthy lifestyles through confidential one-on-one support as well as through interactive programs and resources. Some of the topics they address are healthy relationships, stress management, nutrition, sexual assault, drug and alcohol use, and sexual health (see http://ssac.gmu.edu/). Students in need of these services may contact the office by phone at 703-993-3686. 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 http://ssac.gmu.edu/make-a-referral/.

For additional information on the College of Education and Human Development, please visit our website https://cehd.gmu.edu/.

Other Requirements

• Grading

Every attempt will be made to grade and return assignments in a timely manner to provide students with constructive feedback. To provide students the opportunity to fully assess the feedback provided on graded assignments, the professor will be happy to answer any questions at the next class period following the return of the assignments or during the professor's office hours. The professor acknowledges the passion with regards to grades, but unprofessional and uncivil behavior either in person or through other modes of communication will not be tolerated.

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(contact instructor in advance), 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 before the course meeting 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.

• E-mail Correspondence

Only messages that originate from a George Mason University address will be accepted. In the subject line of the e-mail ensure you have the course name (ATEP 300) The following is an appropriate professional format:

Dear Professor Crawford; (Beginning salutation)

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

Regards, (Ending Salutation)

• 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, Smart Phones, or other technology* 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.

• Make up work

Students who are absent or who arrive late without an official university or a medical doctor's excuse will have <u>no</u> make-up quizzes or exams unless an excused absence has been warranted. Students who miss an examination, quiz or other class activity because of an excused absence must complete the assignment *within a week of the excused absence*. It is the student's obligation to pursue any make-up work.

• Late Assignments

All work is due at the beginning of class time on the indicated day. NO LATE WORK WILL BE ACCEPTED AND WILL RESULT IN A 0 GRADE!!!