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

ATEP 300 - 001 - Functional Anatomy
3 Credits, Fall 2020
Tuesdays at 12 noon – 1:15pm: Colgan Hall, room 318

Faculty

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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 hybrid format. 50% of the course will be delivered face to face and meet every Tuesday during the semester. At the universities request beginning November 30th, 2020 all in person classes will transition to online to finish out the semester. The other 50% of the course will be delivered online using an asynchronous format via Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password.

Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see: https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers

To get a list of supported operation systems on different devices see: https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems

- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
    - Adobe Acrobat Reader: https://get.adobe.com/reader/
    - Windows Media Player: https://support.microsoft.com/en-us/help/14209/get-windows-media-player
    - Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations

- Log-in Frequency:

Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least 3 times per week.

- Participation:

Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.

- Technical Competence:

Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.

- Technical Issues:

Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.

- Workload:

Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and

assignments due.

- Instructor Support:

Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.

- Netiquette:

The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words*. Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

- Accommodations:

Online learners who require effective accommodations to ensure accessibility must be registered with George Mason University Disability Services.

Face coverings and sanitation

A suitable cloth face covering (minimum) must be worn at all times during in person class meetings. Each student will also be socially distanced of a minimum of 6 feet while seated during class. During palpation days each student will need to use hand sanitizer after palpating that will be provided by the university. Between student change over during palpation lab, the tables will be disinfected and cleaned.

Learner Outcomes or Objectives

This course is designed to enable students to do the following items.

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. (2019). Trail Guide to the Body, 6th Edition. Books of Discovery. (ISBN: 978-0-9987850-6-6)
3) Biel, A. (2019). Trail Guide to the Body Student Workbook, 6th Edition. Books of Discovery. (ISBN: 978-0-9914666-7-2)
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 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

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 or end of class for the required reading. This will be a brief multiple choice and true-false assessment of your knowledge from the reading.

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

online by the specified due date. You MUST follow the directions and complete all student workbook requirements: it is says to color, label, etc you must complete for credit. Colored pencils or markers are needed. **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 pre-approved absence or proof of illness.***

Fieldwork

Fieldwork is not required for this class.

Grading

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	**2**	**50**	**100**
		TOTAL POINTS	**450**

Grading Policies

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

A: 418 - 450 pts. (93%)
A-: 405 - 417 pts. (90%)
B+: 391 - 404 pts. (87%)
B: 373 - 390 pts. (83%)
B-: 360 - 372 pts. (80%)
C+: 346 - 359 pts. (77%)
C: 328 - 345 pts. (73%)
C-: 315 - 327 pts. (70%)
D: 283 - 314 pts. (63%
F: < 282

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	ASSIGNMENT
8/25 (In Person)	Introduction to course and the Study of Kinesiology, (Review)			**#1 – In Person**
9/1 (In person)	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 - Online**
9/8 (In Person)	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**	**#3 - Online**
9/15 (In Person)	Muscle names, contractions, roles, determination of muscle action	**F**: Chapter 2, pg 35-48 **TG**:pg 35-37	**#3**	**#4 - Online**
9/22 (In Person)	Neuromuscular system, dermatome/myotome	**F**: Chapter 2, pg 48-62 **TG**:pg 42 **SWB#3**: 4, 16, 17, 18, 23	**#4**	**#5 – In Person**
9/29 (In Person)	***Written Examination #1***			

10/6 (In Person)	Shoulder girdle lecture Shoulder Joint lecture Palpation Intro Lecture	**F:**pg Chapter 4, 89-104, Chapter 5, 111-135 **TG:** 1-18, 46-50, 61-62, 65-66. **AND** pg 46, 48-50, 61-65, 100, 102-103	**#5**	
10/13 (In Person)	Shoulder Girdle Palpation	**TG:**pg 46-59, 68-70, 82-88, 102	**#6**	
10/20 (In Person)	Shoulder Joint Palpation	**TG:**pg 46-51, 59-60, 67-81, 89-94, 99, 104-106, 274 **SWB#4:**pg 1-2, 5, 25-26, 28-30, 32 **SWB#5:**pg 27, 31, 33-50		
Online	Elbow: Radioulnar Joint Lecture	**F:** Chapter 6**,** 143-162 **TG:**pg 108, 110-112 **SWB#6:**pg 52-55		
Online	Wrist and Hand joint lecture	**F:** Chapter 7, pg 169-201 **TG:**pg 116-119, 108, 110-112, 119-120, 127-131, 149 **SWB#7:**pg 56-82		
10/27 (In Person)	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	**#7** **#8**	
11/3 (In Person)	***Written Exam #2***			
11/10 (In Person)	***Palpation Exam #1***			
Online	Pelvis and Hip Joint Lecture	**F:** Chapter 9, pg 229-266 **TG:**pg 276-283 **SWB#8:** 143-159		
Online	Thigh and Knee Lecture	**F: Chapter 10, pg 273-287** **TG:**pg 305, 344-345, 347-348, 392-392 **SWB#9:** pg 160-177		
11/17 (In person)	Pelvis and Hip Joint Palpation Knee and Thigh Palpation	**F :pg 284-295, 315-342** **TG:**pg 306-314, 350-353,	**#9** **#10**	

		394-397		
Online	Lower Leg, Ankle and Foot Lecture	**F: Chapter 11, pg 293-323** **TG:**pg 354 - 365 **SWB#10:** pg 179-208		
11/24 (In person)	Lower Leg, Ankle and Foot Palpation	**TG:pg 356-365, 371-391, 398-405**	**# 11**	
12/1 Online	Trunk & Spinal Column Lecture	**F:** Chapter 12, pg 329-356 **TG:**pg 168, 170-174, 188-195, 240-243 **SWB#11:** pg 85-117		
12/1 Online	Trunk & Spinal Column Palpation	**TG:**pg 169, 175-187, 196-223, 244-249	**# 12**	
12/8 Online	***Written Exam #3***			
12/15 Online	***Palpation Exam #2 (FINAL)***			
	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/.

- For information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus

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

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.

E-mail Correspondence

Only messages that originate from a George Mason University address will be accepted.
The following is an appropriate professional format:
Dear Ms. Murphy, *(Beginning salutation)*

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

Regards, *(Ending Salutation)*
Heather Murphy *(Your name)*