

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

ATEP 300 003—Functional Anatomy
(3 cr) Spring 2020
MON/WED 1:30 – 2:45 P.M. COLGAN HALL 318 (SCI-TECH)

Faculty

Name: Stuart McCrory, MS, ACSM-EP, CSCS
Office Hours: By Appointment
Office Location: KJH 220B
Email Address: cmccrory@gmu.edu

Teaching Assistants

TBD

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, 5th Edition. Books of Discovery.
- 4) Biel, A. (2010). Trail Guide to the Body Flashcards, 4th 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**

- **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 the student's knowledge from the reading. If you are late to class, you cannot make up the quiz at the end of class. If a quiz is missed due to an excused absence, it can be made up upon the student's return to class.

- **Written Examinations**

- Three written examinations will be administered. The format of the examinations will be multiple choice, true/false, labeling, short answer, matching, and/or 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!** If a student is unable to submit their workbook due to an excused absence, they will be allowed to submit it upon their return to class.

- **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 with prior notice to the professor, 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 before the beginning of class time. 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, 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>). Student 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. McCrory, (Beginning salutation)

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

Regards, (Ending Salutation)

Stuart McCrory (Your name)

- **COURSE PERFORMANCE EVALUATION WEIGHTING**

| Evaluation Type | Number | % each | Total % / Evaluation |
|---|-----------|------------|----------------------|
| In-class Activities | 5 | 1 | 5 |
| Student Work Book Assignments | 11 | 1 | 11 |
| Quizzes | 10 | 2.4 | 24 |
| Written exams | 3 | 10 | 30 |
| Palpation exams (includes final) | 3 | 10 | 30 |
| TOTAL % | | | 100 |

- **GRADING POLICIES**

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

| | |
|----------------|----------------|
| A: 93 – 100% | C+: 77 – 79.9% |
| A-: 90 – 92.9% | C: 73 – 76.9% |
| B+: 87 – 89.9% | C-: 70 – 72.9% |
| B: 83 – 86.9% | D: 60 – 69.9% |
| B-: 80 – 82.9% | F: < 59.9% |

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/policies-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 <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://coursesupport.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/>).
- 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 <http://studentsupport.gmu.edu/>, and the OSS staff will follow up with the student.
- 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/>.

TENTATIVE COURSE SCHEDULE

| DATE | TENTATIVE TOPIC | READING ASSIGNMENT | QUIZ | ASSIGNMENT |
|------|---|--|------|--|
| 1-22 | Introductions | | | ICA #1 |
| 1-27 | Lecture 1 Kinesiology Terms, Body Regions, Planes/Axes of Motion | | | |
| 1-29 | Lecture 2 Skeletal system, Bone type/features/markings | F: Chapter 1, pg 1-14 TG:pg 20-22, 32-34 | | ICA #2 |
| 2-3 | Lecture 3 Diarthrodial Joints | F: Chapter 1, pg 14-27 TG:pg 23-31 | #1 | ICA #3 SWB#1: 6, 7, 8, 14, 15 SWB#2: 9, 10, 11, 12, 13 |
| 2-5 | Lecture 4 Kinesthesia & Proprioception | F: Chapter 2, pg 53-63 TG:pg 23-31 | #2 | ICA #4 |
| 2-10 | Lecture 5 Skeletal Muscle Nomenclature, fiber types, terminology, contractions, and actions | F: Chapter 2, pg 35-47 TG:pg 35-37 | #3 | ICA #5 SWB#3: 4, 16, 17, 18, 23 |
| 2-12 | Written Examination #1 | | | |
| 2-17 | Lecture 6 Palpation Intro Lecture Shoulder Girdle Bony Landmarks | F:pg Chapter 4, 91-108 TG: 1-18, 46-59, 61-62, 65-66, 68-70, 82-88, 102 | | SWB#4: 1-2, 5, 25-26, 28-30, 32 |
| 2-19 | Lecture 6 (cont) Shoulder Girdle Muscles | | #4 | |
| 2-24 | Lecture 7 Shoulder Joint Bony Landmarks | F:pg Chapter 5, 115-122 TG:pg 46, 48-50, 61-65, 100, 102-103 | | |
| 2-26 | Lecture 7 (cont) Shoulder Joint Muscles | F: Chapter 5 123-141 TG:pg 46-51, 59-60, 67-81, 89-94, 99, 104-106, 274 | #5 | |
| 3-2 | Lecture 8 & 9 Elbow, Wrist, and Hand Bony Landmarks | F: Chapter 6, 149-156/177-186 TG:pg 108, 110-112 | | SWB#5: 27, 31, 32-48 |
| 3-4 | Lecture 8 & 9 (cont) Finish Elbow, Wrist and Hand Muscles and Palpation | F: Chapter 6, pg 157-170/ Chapter 7, pg 187-210 TG:pg 108-126/pg 127-155 | #6 | |
| 3-9 | Spring break - No Class | | | |
| 3-11 | | | | |
| 3-16 | Exam Review | | | |
| 3-18 | Written Exam #2 | | | |
| 3-23 | Palpation Exam #1 | | | |
| 3-25 | Flex Day – NO CLASS | | | |

| | | | | |
|------|---|--|-----|--|
| 3-30 | Lecture 10 Pelvis and Hip Joint Bony Landmarks | F: Chapter 8, pg 219-228 TG:pg 276-295 | | SWB#6: 52-58 SWB#7: 59-75, 78 |
| 4-1 | Lecture 10 Pelvis and Hip Joint Muscles | F: Chapter 8, pg 229-258 TG:pg 296-335 | #7 | |
| 4-6 | Lecture 11 Thigh and Knee Bony Landmarks & Muscles | F: Chapter 9, pg 265-271/ TG:pg 344-365 F: Chapter 9, pg 271-281/ TG:pg 366-389 | #8 | SWB#8: 143-154,156-159 |
| 4-8 | Flex day / Review Day | | | |
| 4-13 | Lecture 12 Lower Leg, Ankle, and Foot Bony Landmarks | F: Chapter 10, pg 287-300 | | SWB#9: 160-177 |
| 4-15 | Lecture 12 (cont) Lower Leg, Ankle and Foot Muscles | F: Chapter 10, pg 301-318 | #9 | |
| 4-20 | Lecture 13 Trunk & Spinal Column Bony Landmarks | F: Chapter 11, pg 329-338 TG:pg 168-187 | | SWB#10: 179-208 |
| 4-22 | Lecture 13 (cont) Trunk & Spinal Column Muscles | F: Chapter 11, pg 339-359 TG:pg 188-212 | #10 | |
| 4-27 | Written Exam 3 | | | |
| 4-29 | Palpation Exam 2 | | | SWB#11: 85-112 |
| 5-4 | Final Exam Review – Teacher Evaluations | | | |
| 5-6 | Comprehensive Palpation Exam #3 1:30-2:45 | | | |
| | F: Floyd. Manual of Structural Kinesiology TG: Trail Guide to the Body ICA: In-Class Assignment 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.

Student Acknowledgement of Syllabus

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

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

(Instructor Copy: Submit to the instructor at the end of the first class meeting)