



TEXAS A&M UNIVERSITY
SAN ANTONIO

**College of Education and Human Development
Department of Counseling, Health & Kinesiology
EDKN 3315-900 – Functional Anatomy (3 credits)
Fall 2024**

Instructor: T. Brock Symons, Ph.D.

Class Time & Location: 3:30 p.m. to 4:45 p.m.

Monday (Face-to-Face), Sci Tech 279

Wednesday (Online Synchronous via WebEx or Asynchronous)

E-mail & Phone: tsymons@tamusa.edu (preferred contact method) and 210 – 784 – 2587 (office)

Office Hours: Monday and Tuesday at 1:30 – 3:30 pm via face-to-face or WebEx or by appointment via email.

I understand that this may not be possible for everyone; so, you can always email me at tsymons@tamusa.edu if you have any questions.

I am available from 10:00 a.m. – 5:30 p.m. Central Standard Time (EST) Monday through Friday to contact via telephone and/or e-mail using your Texas A&M University – San Antonio e-mail. If these times are not convenient for you, please let me know and I will be happy to accommodate your schedule if possible. I provide you with these times to make it easier to communicate with me, not to limit our contact and want you to know that, should you need to contact me outside these periods, you should not hesitate to do so.

In the event a third party needs to contact me, please direct them to my contact information listed under "E-mail & Phone" information above. No third party should use your login credentials to gain access to the classroom in Blackboard (Bb).

I will respond to your inquiry within 24 hours of receipt except on weekends and holidays, it will then be the next business day. If I do not respond in that period, know that I probably did not receive your message.

Office Location: SciTech 142K

Welcome: to the Texas A&M University – San Antonio, Department of Counseling, Health and Kinesiology's Functional Anatomy (EDKN 3315 – 600) course. This course is designed as a hybrid class. This is a 5-week course in which you will learn how the human body produces movement, specifically the anatomical structures that are involved in the human movement.

The hybrid course contains numerous assignments, quizzes and exams designed to help you obtain the core concepts of each organ system studied in this course. You will read, attend class, and watch online modules and participate in both classroom and online activities.

Required Textbook: Floyd, R.T. (2021). Manual of Structural Kinesiology (21thed).

Boston: McGraw Hill. ISBN10: 1260237753

ISBN13: 9781260237757

<https://www.bkstr.com/texasamsanantoniostore/home>

Recommended Textbooks: NA

Course Description: This is a basic course in human anatomy. An in-depth study of the structure involved in human movement will be studied as well as the basic functions of these structures.

Course Prerequisites: BIOL 1306 and 1307, or BIOL 2401.

Course Objectives: This course emphasizes the acquisition of knowledge appropriate for developing students and professionals as lifelong learners. In addition, course content assists the student in developing the knowledge to describe skeletal and neuromuscular structures of the human body, identify how these systems adapt to skillful movement, physical activity, and fitness, and analyze their contribution to motor performance.

Student Learning Outcomes: Upon completion of this course, each student will be able to:

1. Demonstrate correct usage of anatomical and mechanical terminology in describing and analyzing performance
2. Use proper terminology when describing structures and functions of the human body
3. Identify bones and boney landmarks as they relate to muscle attachments
4. Identify and provide examples of different types of joint articulations
5. Identify muscles of the body
6. Demonstrate an understanding of muscle function (action)
7. Integrate muscle and bone's involvement in movement (actions)
8. Demonstrate an understanding of the nervous systems as it relates to movement
9. Explain common injuries/conditions/disabilities related to specific areas of the human body
10. Apply principles of biomechanics to teaching, coaching, and human movement.

Outcomes are also based on the expected Knowledge, Skills, and Abilities (KSA's) for exercise science majors from the American College of Sports Medicine. Upon completion of this course, each student will be able to demonstrate the following competencies required for the Heath/Fitness Specialist exam:

- 1.1.3 Knowledge of the definitions of the following terms: supination, pronation, flexion, extension, abduction, adduction, hyperextension, rotation, circumduction, agonist, antagonist, and stabilizer
- 1.1.4 Knowledge of the plane in which each muscle action occurs

- 1.10.7 Knowledge of the following terms: shin splints, sprain, strain, tennis elbow, bursitis, stress fracture, tendonitis, patellar femoral pain syndrome, low back pain, plantar fasciitis, and rotator cuff tendonitis
- 1.1.1 Knowledge of the basic structures of bone, skeletal muscle, and connective tissue
- 1.1.6 Knowledge of the following curvatures of the spine: lordosis, scoliosis, and kyphosis
- 1.1.39 Ability to identify the major bones and muscles. Major muscles include but are not limited to, the following: trapezius, pectoralis major, latissimus dorsi, biceps, triceps, rectus abdominus, internal and external obliques, erector spinae, gluteus maximus, quadriceps, hamstrings, adductors, abductors, and gastrocnemius
- 1.1.40 Ability to identify the major bones. Major bones include, but are not limited to the clavicle, scapula, sternum, humerus, carpals, ulna, radius, femur, fibia, tibia, and tarsals
- 1.1.41 Ability to identify the joints of the body
- 1.1.42 Knowledge of the primary action and joint range of motion for each major muscle group
- 1.1.43 Ability to locate the anatomical landmarks for palpation of the peripheral pulses

Undergraduate Class Policies

A student has the right to expect competent, well-organized instruction for the full number of clock hours allotted for a course; to sufficient written assignments, graded fairly and with reasonable promptness to show the student's academic standing in the course at least before mid-semester; to have ample opportunity to confer with the instructor at published office hours and to review graded written work; to freedom from ridicule, discrimination, harassment or accusations in the presence of other students or faculty members; and to an avenue for appealing to higher academic authority in case of alleged unfairness by an instructor.

Student Rights and Responsibilities: Students' Rights and Responsibilities: The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

Students' Rights:

1. A student shall have the right to participate in a free exchange of ideas, and there shall be no University rule or administrative rule that in any way abridges the rights of freedom of speech, expression, petition and peaceful assembly as set forth in the U.S. Constitution.
2. Each student shall have the right to participate in all areas and activities of the University, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, gender identity, gender expression, and pregnancy/parenting or veteran status in accordance with applicable federal and state laws.
3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.
4. Each student subject to disciplinary action arising from violations of university student rules shall be assured a fundamentally fair process.

Students' Responsibilities:

1. A student has the responsibility to respect the rights and property of others, including other students, the faculty, and administration.
2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, Student Code of Conduct, on our website, and University Catalog, and to comply with them, as well as with federal, state, and local laws.
3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.
4. A student has the responsibility to recognize the University's obligation to provide a safe environment for learning.
5. A student has the responsibility to check their university email for any updates or official university notifications.

We expect that students will behave in a manner that is dignified, respectful, and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation, or disability. Conduct that infringes on the rights of another individual will not be tolerated.

Students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct policies and procedures please review the Student Code of Conduct (<https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/documents/Student-Handbook-2022-23.pdf>) or visit the resources available in the OSRR website (<https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/academic-integrity.html>).

Academic Dishonesty: Students are expected to do their own course work. Academic dishonesty is a violation of the Student Code of Conduct; therefore, the instructor may report any form of academic dishonesty to the Office of Student Rights and Responsibilities. Please review the Student Handbook for a complete description of the process.

Artificial Intelligence Policy: One assumes that all work submitted by students will be generated by the students themselves, working individually or in groups. Students should not have another person/entity do the writing of any portion of an assignment for them, which includes hiring a person or a company to write assignments and/or using artificial intelligence (AI) tools like ChatGPT. Use of any AI-generated content in this course qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

Class Attendance: A vital part of every student's education is regular attendance of class meetings. Any absences tend to lower the quality of a student's work in a course, and frequent or persistent absences may preclude a passing grade or cause a student to be dropped from one or more courses upon the request of a faculty member to the Provost and Vice President for Academic Affairs.

Religious Observances: Texas A&M University-San Antonio recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or course work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

Research on Human Subjects: Research that involves human subjects must be approved by the Institutional Review Board for the Protection of Human Subjects.

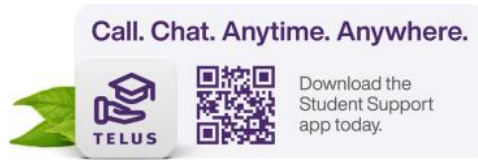
Academic Accommodations for Individuals with Disabilities: Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, Disability Support Services is located in the Central Academic Building, Suite 210. You can also contact us via phone at (210) 784-1335, visit us <https://www.tamusa.edu/Disability-Support-Services/index.html> or email us at dss@tamusa.edu. Disabilities may include, but are not limited to, attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability-related needs with Disability Support Services and their instructors as soon as possible.

Academic Learning Center: The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the Tools section of Blackboard. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

Counseling/Mental Health Resources: As a college student, there may be times when personal stressors interfere with your academic performance and negatively impact your daily functioning. If you are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment, call 210-784-1331 or visit Madla 120.

All mental health services provided by the SCC are free and confidential (as the law allows). The Student Counseling Center provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services. For more information on SCC services visit tamusa.edu/studentcounseling.

Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2').



Additionally, the TELUS Student Support App provides a variety of mental health resources to including support for in the moment distress, an anonymous peer to peer support network, mental health screenings, podcasts, and articles to improve your mental wellbeing.

Emergency Preparedness: JagE Alert is Texas A&M University-San Antonio’s mass notification. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option to receive a text message, email with instructions and updates. To register or update your information visit: <https://tamusa.bbcportal.com/>.

More information about Emergency Operations Plan and the Emergency Action Plan can be found here: <https://www.tamusa.edu/about-us/emergency-management/>.

Download the SafeZone App (<https://safezoneapp.com/>) for emergencies or call (210) 784-1911. Non-Emergency (210) 784-1900.

Financial Aid and Verification of Attendance: According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. The faculty will provide the Office of Financial Aid with an electronic notification if a student has not attended the first week of class. Any student receiving federal financial aid who does not attend the first week of class will have their aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester may also need to return a portion of their federal aid.

Writing, Language, and Digital Composing Center: The Writing, Language, and Digital Composing Center supports graduate and undergraduate students in all three colleges as well as faculty and staff. Tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Our language tutors support students enrolled in Spanish courses and students composing in Spanish for any assignment. Our digital studio tutors support students working on digital projects such as eportfolios, class presentations, or other digital multimedia projects. Students can schedule appointments through JagWire under the Student Services tab. Click on “Writing, Language, and Digital Composing Center” to make your appointment. The Center offers face-to-face, synchronous online, and asynchronous digital appointments. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our website at <https://www.tamusa.edu/academics/>.

Meeting Basic Needs: Any student who has difficulty affording groceries or accessing sufficient food to eat every day or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to submit a CARE referral (<https://www.tamusa.edu/university-policies/Student-Rights-and-Responsibilities/file-a-report.html>) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to direct you to available resources.

Military Affairs: Veterans and active-duty military personnel are welcomed and encouraged to visit the Office of Military Affairs for any question involving federal or state VA Education Benefits. Visit the Patriots' Casa building, room 202, or to contact the Office of Military Affairs with any questions at military.va@tamusa.edu or (210)784-1397.

Statement of Harassment and Discrimination: Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equal opportunity, and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality and the uniqueness of the individual within our state, nation, and world. All decisions and actions involving students and employees should be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, gender identity, gender expression, or pregnancy/parenting status. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the appropriate offices within their respective units.

Texas A&M University-San Antonio faculty are committed to providing a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex- or gender-based discrimination or harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking, know that help and support are available. A&M-San Antonio's Title IX Coordinator can support those impacted by such conduct in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victim advocates) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment, sexual violence, or other related misconduct, the faculty member must share that information with the university's Title IX Coordinator (titleix@tamusa.edu, 210-784-2061, CAB 439K). If you wish to speak to a confidential employee who does not have this reporting requirement, you can contact the Student Counseling Center at (210) 784-1331 or visit them in Madla 120.

Pregnant/Parenting Students: Texas A&M-San Antonio does not require a pregnant or parenting student, solely because of that status or issues related to that status, to (1) take a leave of absence or withdraw from their degree or certificate program; (2) limit the student's studies; (3) participate in an alternative program; (4) change the student's major, degree, or certificate program; or (5) refrain from joining or cease participating in any course, activity, or program at the University. The university will

provide such reasonable accommodations to pregnant students as would be provided to a student with a temporary medical condition that are related to the health and safety of the student and the student's unborn child. These could include maintaining a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals and their unborn child; excused absences because of illness or medical appointments; modified due dates for assignments; rescheduled tests/exams; taking a leave of absence; and being provided access to instructional materials and video recordings of lectures for excused absences, if these would be provided to any other student with an excused absence. Pregnant/parenting students are encouraged to contact the Title IX Coordinator with any questions or concerns related to their status (titleix@tamusa.edu; 210-784-2061; CAB 439K).

Texas A&M-San Antonio has also designated the Title IX Coordinator as the liaison officer for current or incoming students who are the parent or guardian of a child younger than 18 years of age. The Title IX Coordinator can provide students with information regarding support services and other resources.

The Six-Drop Rule: Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

Administrative Drops for Non-Attendance: A faculty member may drop an undergraduate student for non-attendance at any time prior to the mid-point of a long semester. A drop processed by a faculty member for non-attendance will be treated as a non-punitive grade unless the undergraduate student is subject to the requirements of Senate Bill 1231. The Office of the Registrar will treat all drops processed by a faculty member in accordance with the requirements of Senate Bill 1231 and may change a grade of W to a grade of WS or an F, depending on the student's status.

Incompletes: The spirit of the "Incomplete" is to give a student an opportunity to complete a course after the end of the semester. An Incomplete will only be considered under specific circumstances: 1. 70% of the class has been completed and student is passing with a "C" or better 2. The circumstance for which the "I" is requested is supported with documentation 3. Student has been attending class on a regular basis Incompletes are not to be used to remedy excessive absences. Unforeseen circumstances precipitating the request for an "I", should occur near the end of the semester. Students who are experiencing difficulties at the beginning or midway through the course should contact their professor immediately to discuss options. When a professor agrees to grant an "I", a contract between the student and professor that outlines a specific timeline for completion of the course will be generated. Topics such as the highest possible grade will also be outlined. If the contract is not fulfilled, the professor will submit a change of grade form with earned letter grade. All "I"s will automatically revert to an "F" after one year.

Grading Policy: Your final grade will be presented as a percentage. Your final grade will be determined by dividing the total points you earned by the total points offered in this course. *I will not respond to*

individual request for calculation of grade. It is your responsibility to keep a record of the grade points you have earned in the exams, assignments, and in-class quizzes. All grades will be posted to Blackboard.

Your final grade will be determined as a percentage of the following points:

	Points
Exams (125 points per exam)	375
Quizzes (10 points per quiz)	90
Assignments (10 points per assignment)	90
Partner Project (Section Assignments 60 points + Paper 40 points)	<u>100</u>
Total	655

Grading Scale

90 or higher = A, 80 – 89 = B, 70 – 79 = C, 60 – 69 = D, Below 59.99 = F

A grade of “C” or better must be earned in this course to satisfy Kinesiology requirements. Majors who do not earn a grade of “C” or better will be required to repeat the course. I will round up your grade under the following condition, if you earn an ##.9, then I will round your grade up to the next letter grade. Therefore, if you an 89.9, I will then round your grade up to 90.0 and you will earn an A. If you earn an 89.8, then your final grade will be a B.

No changes to your final grade will occur once class has ended unless I have made a mistake. You are given the opportunity to follow your grade throughout the semester via Blackboard; thus, you should not be surprised with the grade you earn. There are no exceptions (eligibility, financial aid, etc.)

Course Requirements: Consider the following, with some lectures occurring online, you will be responsible for viewing the online materials and/or PowerPoint presentations and keeping up with the module quizzes and assignments in order to not fall behind. You will be responsible for ensuring that you completely understand the key concepts that make up the learning objectives of each module, essentially teaching yourself. The responsibility for ensuring your success in this course will be yours and that is what life-long learning is all about.

You will depend on technology to submit and complete course work and to communicate. The key word here is “depend.” If cyber communication is disrupted, you will be required to submit assignments via email or in an alternate manner to Texas A&M University – San Antonio, Health and Kinesiology Program, Science and Technology Building, San Antonio, TX 78224. Please keep in mind; you might need to find alternate internet sources if the computer at your home/work has an outage. Texas A&M University – San Antonio and many public libraries offer access. Need help? Contact the IT HelpDesk at (210) 784-4357 or helpdesk@tamusa.edu . Hours: Monday through Friday: 8:00 a.m. – 6:00 p.m. (closed Saturday and Sunday).

Exams. There will be 3 regular exams, each worth 125 points, throughout the semester. The exams will consist of multiple-choice questions, true or false, matching, diagram labeling questions, and/or short descriptive questions. Exams will cover material from the preceding lectures.

Quizzes. Module quizzes will be given to assess your knowledge following the completion of a module. You will be required to complete 9 module quizzes. Each module quiz will be worth 10 points and will be given on Blackboard. Quizzes will cover material from the particular module, semester total of 90 points. Assignments. There will be 9 assignments, each worth 10 points. Each assignment will consist of short answer question(s) and will cover material from preceding lectures, semester total 90 points. Make-up

Exam/Late Assignment Policy: There will be no additional make-up for all assignments.

(Exceptions: If you are, absent because of school-sponsored activity (you need to notify me at least one week in advance) or illness with doctor's excuse. In which case, you need to take the exam on specific date & time that I will assign).

All class work is due on the date and time assigned; work received later than the due date will be penalized one letter grade per day, after which 4 days will result in a zero (F).

- *I do not offer extra credit.*
- *I do not offer Independent Studies if an acceptable grade is not earned*

Technology Requirements: Quizzes are to be completed on Blackboard (Bb) according to the directions provided.

I will be holding in person / virtual office hour via WebEx. I will post a WebEx meeting link to Blackboard and we will be able to meet virtually.

Continuing and regular use of your TAMUSA e-mail is expected. You must be able to use Internet search tools, access Bb, download and print documents and upload assignments.

To access Blackboard, go to <https://tamusa.blackboard.com/>.

Library Support for COEHD Programs & Courses: The [A&M-SA Library](#) provides access to thousands of researches and learning materials for COEHD students, faculty, and staff. These resources are mainly provided in electronic format and are accessible 24/7/365 with Jaguar log-in credentials. They include, but are not limited to, scholarly academic journals, professional publications, newspapers, ebooks, streaming video, and curated web resources. Additionally, there is a smaller physical collection, study space, and computer access available in CAB 202. Two unique physical collections housed in CAB 202 are the curriculum materials (sample textbooks, teachers' guides, activity guides, manipulatives, models, classroom reading collections, educational games, etc.) and the children's literature collection. These materials are available for checkout and can be used by students in lesson planning and in their clinical school placements.

[Education Librarian Kimberly Grotewold](#) is available to assist with finding, accessing, evaluating, and effectively using relevant library resources and other information. She has developed subject, topic, and course-specific research guides which are linked into Blackboard (under Campus Resources in the left menu) and are accessible through the [Library's website](#) under the Research Guides link. If you have questions, concerns, or need help, please contact her through email at kimberly.grotewold@tamusa.edu; via phone: (210) 784-1519; or request an appointment using her [online scheduling calendar](#).

Schedule of Course Activities:

Module	Topic	Date	Reading	Tasks Objectives	Deliverables (Date Posted)
1	Foundations of Structural Kinesiology F-2-F = Face-to-Face Lecture	8.26 F-2-F	Ch. 1	<ul style="list-style-type: none"> • Syllabus and Course Introduction • To review the anatomy of the skeletal system • To review and understand the terminology used to describe body part locations, reference positions, and anatomical directions 	Assignment 1 Post-Mod Quiz
		8.28	<ul style="list-style-type: none"> • To review the planes of motion and their respective axes of rotation in relation to human movement • To describe and understand the various types of bones in the human body and their functions, features, and characteristics • To describe and understand the various types of joints in the human body and their functions, features, and characteristics • To describe and demonstrate the joint movements 		
		9.2	<i>Labor Day</i>		
2	Neuromuscular Fundamentals	9.4	Ch. 2	<ul style="list-style-type: none"> • To review the basic anatomy and functions of the muscular and the nervous systems • To review and understand the basic terminology used to describe muscular locations, arrangements, characteristics, and roles, as well as neuromuscular functions • To learn and understand the different types of muscle contraction and the factors involved in each 	Assignment 2 Post-Mod Quiz
		9.9 F-2-F		<ul style="list-style-type: none"> • To learn and understand basic neuromuscular concepts in relation to how muscles function 	

- in joint movement and work together in effecting motion
- To develop a basic understanding of the neural control mechanisms for movement

3	Basic Biomechanical Factors and Concepts	9.11	Ch. 3	<ul style="list-style-type: none"> • To know and understand how the proper application of levers can help improve physical performance • To know and understand how the musculoskeletal system functions as a series of simple machines • To know and understand how knowledge of torque and lever arm lengths can help improve physical performance • To know and understand how the proper application of Newton’s laws of motion can help improve physical performance • To know and understand how knowledge of balance, equilibrium, and stability can help improve physical performance • To know and understand how knowledge of force and momentum can help improve physical performance • To know and understand the basic effects of mechanical loading on body tissues 	Assignment 3 Post-Mod Quiz
		9.16 F-2-F			
		9.18		Catch-Up and Exam Preparation	

EXAM 1	9.23 F-2-F	Modules 1 to 3 (Chapters 1,2,3)
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4	Shoulder Girdle and Shoulder Joint	9.25	Ch. 4	<ul style="list-style-type: none"> • To identify and label bones and bony features of the shoulder girdle • To identify and label joints and ligaments of the shoulder girdle • To describe all the movements of the shoulder girdle and list their respective planes of movement and axes of rotation
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		9.30 F-2-F	Ch. 5	<ul style="list-style-type: none"> • To identify and explain the origin, insertion, and action for each muscle of the shoulder girdle • To identify and label bones and bony features of the shoulder joint • To identify and label ligaments of the shoulder joint • To describe all the movements of the shoulder joint and list their respective planes of movement and axes of rotation • To identify and explain the origin, insertion, and action for each muscle of the shoulder joint 	Assignment 4 Post-Mod Quiz
5	Muscular Analysis of Selected Exercises	10.2	Ch. 12	<ul style="list-style-type: none"> • To begin analyzing sport skills in terms of phases and the various joint movements occurring in those phases • To analyze an exercise to determine the joint movements and positions, the specific muscles involved and their contraction types in accomplishing those movements, and/or maintaining those positions • To learn to group individual muscles into units that cause, control, or prevent certain joint movements 	
	Partner Project Assignment	10.7 F-2-F		<i>Partner Project – Movement Analysis Task 1 (PPMA 1)</i> <ul style="list-style-type: none"> • <i>Contact Your Partner(s) and Movement Selection</i> 	PPMA 1
6	Elbow, Wrist, & Hand	10.9	Ch. 6	<ul style="list-style-type: none"> • To identify and label bones and bony features of the elbow and radioulnar joints • To identify and label joints and ligaments of the elbow and radioulnar joints • To describe all the movements of the elbow and radioulnar joints and list their respective planes of movement and axes of rotation 	
		10.14F-2-F			

	Partner Project Assignment	10.16		<p><i>Partner Project Movement Analysis</i> <i>Task 2 (PPMA 2)</i></p> <ul style="list-style-type: none"> • <i>Movement Classification</i> • <i>Spatial Analysis</i> 	PPMA 2
		10.23F-2-F		<ul style="list-style-type: none"> • To identify and explain the origin, insertion, and action for each muscle of the elbow and radioulnar joints 	Assignment 6 Post-Mod Quiz
		10.23		Catch-Up and Exam Preparation	
	EXAM 2	10.28 F-2-F		Modules 4 to 8 (Chapters 7,9,10,11,12)	
7	Hip Joint & Pelvic Girdle	10.30	Ch. 8	<ul style="list-style-type: none"> • To identify and label bones and bony features of the hip joint and pelvic girdle • To identify and label joints and ligaments of the hip joint and pelvic girdle • To describe all the movements of the hip joint and pelvic girdle and list their respective planes of movement and axes of rotation • To identify and explain the origin, insertion, and action for each muscle of the hip joint and pelvic girdle • To identify and explain the origin, insertion, and action for each muscle of the hip joint and pelvic girdle 	Assignment 7 Post-Mod Quiz
		11.4 F-2-F			
	Partner Project Assignment	11.6		<p><i>Partner Project Movement Analysis</i> <i>Task 3 (PPMA 3)</i></p> <ul style="list-style-type: none"> • <i>Anatomical Analysis</i> • <i>Muscular Analysis</i> 	PPMA 3
8	Knee Joint	11.11	Ch. 9	<ul style="list-style-type: none"> • To identify and label bones and bony features of the knee joint • To identify and label joints and ligaments of the knee joint • To describe all the movements of the knee joint and list their respective planes of movement and axes of rotation • To identify and explain the origin, insertion, and action for each muscle of the knee joint 	Assignment 8 Post-Mod Quiz

	Partner Project Assignment	11.13		<i>Partner Project Movement Analysis Task 4 (PPMA 4)</i> <ul style="list-style-type: none"> • <i>Stability / Equilibrium Analysis</i> • <i>Levers / Force Analysis</i> 	PPMA 4
9	Ankle and Foot Joints	11.18 F-2-F	Ch. 10	<ul style="list-style-type: none"> • To identify and label bones and bony features of the ankle and foot joints • To identify and label joints and ligaments of the ankle and foot joints • To describe all the movements of the ankle and foot joints and list their respective planes of movement and axes of rotation • To identify and explain the origin, insertion, and action for each muscle of the ankle and foot joints 	Assignment 9 and Post-Mod Quiz
10	Trunk & Spinal Column	11.25 F-2-F	Ch. 11	<ul style="list-style-type: none"> • To identify and label bones and bony features of the trunk and spinal column • To identify and label joints and ligaments of the trunk and spinal column • To describe all the movements of the trunk and spinal column and list their respective planes of movement and axes of rotation • To identify and explain the origin, insertion, and action for each muscle of the trunk and spinal column 	Assignment 10 and Post-Mod Quiz
		11.27		<i>Study day and Thanksgiving Holiday</i>	
	Partner Project	12.2		• Final Paper due Date	
		12.4		• Catch-Up and Exam Preparation	
	EXAM 3	12.11		@ 2:00 to 3:50, Chapters Modules 9 to 11	