KINE 427 – Summer I 2021 THERAPEUTIC PRINCIPLES

M-F 12:00 p.m. – 1:35 p.m. On-line through Zoom

Instructor: John Scott Green, Ed.D., Ph.D., FACSM, Chair: Clinical and Applied Exercise Physiology

Office: Gilchrist Building office 137

Phone & Email & Web: Phone: 862-2952 E-mail: jsgreen@tamu.edu Web page: drjsgreen.com

Office Hours: W 1:45 p.m. – 2:45 p.m. (appointments preferred)

PREREQUISITES: ZOOL 319 ZOOL 320

COURSE GOALS:

1. To acquire a working understanding of the terminology, physiology, and structural / functional anatomy of various neuromuscular and musculoskeletal tissues and systems (skin, blood, tendon, ligament, cartilage, bone, muscle, nerve, connective tissue, and some organ systems) as they pertain to:

a) prevention of specific injuries & diseases c) the phy

c) the physiology of healing and therapeutic strategies

b) physiology of pain & inflammation

- d) treatment & rehabilitation of specific injuries & diseases
- 2. To become familiar with the <u>rationale</u> and <u>techniques</u> for various types preventive and rehabilitative exercise.
- 3. To understand <u>how</u> such common therapeutic modalities as heat, cold, ultrasound, drugs, electricity, and other therapeutic regimens aid in the healing and rehabilitation process. To understand concepts and principles behind various diagnostic and therapeutic technologies. To understand medical strategies and procedures to combat selected injuries and diseases.

COURSE CONTENT:

Lectures, Reading Assignments and Exams. NOTE: Material will be presented in lecture that <u>is not</u> contained in the recommended web based text. Ideally, students should read the recommended text assignments before the lecture on the topic, take comprehensive notes during lecture on lecture slides printed out beforehand, then, using the notes and the text, create "study sheets" from which to:

- 1. commit the necessary material to memory
- 2. learn how to integrate and apply the related concepts.

Section 1. Tissue types, Structure, Characteristics, Function, Sensation

TEST I

Section 2. Pain, Disease, Inflammation, and Hemostasis TEST II

Section 3. Microtraumatic injuries / diseases. Associated healing along with therapeutic strategies Section 4. Macrotraumatic injuries / diseases. Associated healing along with therapeutic strategies TEST III (not comprehensive)

EVALUATION:

Grades for the class will be assigned strictly on the basis of the numerical average of 3 exams. All exams will be in multiple choice format and consist of 10 questions worth 10 points each (100 point total). Exam dates will be announced at least 1 week in advance in consultation with the class majority. The material on these exams will come from lecture and lecture notes. The exams will be conducted via E-mail. Make-up exams will be in accordance with university absentee policy, at the sole discretion of the instructor. Grades are assigned as follows:

90-100%=A 80-89%=B 70-79%=C 60-69%=D Below 60% = F (.50 and greater rounded to next highest integer)

RECOMMENDED TEXT: All reading material will be on the web with the link printed on the PowerPoint slide.

Academic Integrity Statement and Policy

"An Aggie does not lie, cheat or steal, or tolerate those who do."

"Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case" (Section 20.1.2.3, Student Rule 20).

You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at aggiehonor.tamu.edu.

Americans with Disabilities Act (ADA) Policy

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources in the Student Services Building or at (979) 845-1637 or visit disability.tamu.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 Resources and their instructors as soon as possible.

Title IX and Statement on Limits to Confidentiality

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see University Rule 08.01.01.M1):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention – including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, you will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

Students wishing to discuss concerns in a confidential setting are encouraged to make an appointment with Counseling and Psychological Services (CAPS).

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's Title IX webpage.

Statement on Mental Health and Wellness

Texas A&M University recognizes that mental health and wellness are critical factors that influence a student's academic success and overall wellbeing. Students are encouraged to engage in proper self-care by utilizing the resources and services available from Counseling & Psychological Services (CAPS). Students who need someone to talk to can call the TAMU Helpline (979-845-2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends. 24-hour emergency help is also available through the National Suicide Prevention Hotline (800-273-8255) or at suicidepreventionlifeline.org.

Campus Safety Measures

To promote public safety and protect students, faculty, and staff during the coronavirus pandemic, Texas A&M University has adopted policies and practices for the Fall 2020 academic term to limit virus transmission. Students must observe the following practices while participating in face-to-face courses and course-related activities (office hours, help sessions, transitioning to and between classes, study spaces, academic services, etc.):

Self-monitoring—Students should follow CDC recommendations for self-monitoring. Students who have a fever or exhibit symptoms of COVID-19 should participate in class remotely and should not participate in face-to-face instruction. Face Coverings—Face coverings (cloth face covering, surgical mask, etc.) must be properly worn in all non-private spaces including classrooms, teaching laboratories, common spaces such as lobbies and hallways, public study spaces, libraries, academic resource and support offices, and outdoor spaces where 6 feet of physical distancing is difficult to reliably maintain. Description of face coverings and additional guidance are provided in the Face Covering policy and Frequently Asked Questions (FAQ) available on the Provost website.

Physical Distancing—Physical distancing must be maintained between students, instructors, and others in course and course-related activities.

Classroom Ingress/Egress—Students must follow marked pathways for entering and exiting classrooms and other teaching spaces. Leave classrooms promptly after course activities have concluded. Do not congregate in hallways and maintain 6-foot physical distancing when waiting to enter classrooms and other instructional spaces.

To attend a face-to-face class, students must wear a face covering (or a face shield if they have an exemption letter). If a student refuses to wear a face covering, the instructor should ask the student to leave and join the class remotely. If the student does not leave the class, the faculty member should report that student to the Student Conduct office for sanctions. Additionally, the faculty member may choose to teach that day's class remotely for all students.

Personal Illness and Quarantine

Students required to quarantine must participate in courses and course-related activities remotely and must not attend face-to-face course activities. Students should notify their instructors of the quarantine requirement. Students under quarantine are expected to participate in courses and complete graded work unless they have symptoms that are too severe to participate in course activities.

Students experiencing personal injury or Illness that is too severe for the student to attend class qualify for an excused absence (See Student Rule 7, Section 7.2.2.) To receive an excused absence, students must comply with the documentation and notification guidelines outlined in Student Rule 7. While Student Rule 7, Section 7.3.2.1, indicates a medical confirmation note from the student's medical provider is preferred, for Fall 2020 only, students may use the Explanatory Statement for Absence from Class form in lieu of a medical confirmation. Students must submit the Explanatory Statement for Absence from Class within two business days after the last date of absence.