

KINE 439 EXERCISE EVALUATION AND PRESCRIPTION – Spring 2021
Lecture: T TH 11:30 a.m.- 12:45 p.m. GGB 105 Lab: T TH 1:30 – 2:45
(KINE 439 is a Writing Intensive Course)

INSTRUCTORS: Lecture: John Scott Green, Ed.D., Ph.D., FACSM Instructor of record
Lab & Writing: Steve Martin, Ph.D. (see lab syllabus for instructor information)

PHONE: 862-2952

E-MAIL and WEB: jsgreen@tamu.edu <http://drjsgreen.com>

OFFICE: Gilchrist building office 137

OFFICE HOURS: MW 12:00pm - 2:00pm (**appointments preferred**)

LAB OPERATING HOURS: See lab syllabus

PREREQUISITES: KINE 433 - Exercise Physiology
Admission to Professional Phase of the Applied Exercise Physiology Program

REQUIRED TEXTS:

1. American College of Sports Medicine. Guidelines for Graded Exercise Testing and Exercise Prescription, Latest Edition, (10th) Lippincott, Williams, & Wilkins, Philadelphia PA.
2. Thaler, Malcolm S. The Only EKG Book You Will Ever Need, Latest Edition, J.B. Lippincott, Philadelphia PA.

COURSE OBJECTIVES: Upon course completion each student will be able to:

1. Demonstrate written test and associated writing competencies in the areas of cardiovascular physiology, exercise physiology, cardiovascular hemodynamics, control of the cardiovascular system, calculation / estimation of resting and exercise metabolism, ECG interpretation, ACSM program standards, and exercise prescription. Also, to display writing skills related to creating written research reports in exercise physiology.
2. Conduct safe clinical and field evaluations of health and physical fitness in the following areas:
 - assessment of body composition
 - estimation of aerobic capacity and peak oxygen consumption
 - acquisition of data relating to hemodynamic, cardiorespiratory, and electrocardiographic responses to exercise
2. Prescribe safe and appropriate exercise for the maintenance of health and the prevention / rehabilitation of cardiovascular disease based on:
 - interpretation of health and medical history
 - interpretation of clinical and field assessments of cardiovascular and musculoskeletal health

COURSE CONTENT:

In order to accomplish the above listed objectives, the following topics will be covered in lecture. Corresponding reading assignments are in brackets

- concepts and terminology in applied exercise physiology [no reading]
- pathophysiology of cardiovascular disease, risk stratification [no reading]
- physiological control mechanisms of the cardiorespiratory system [no reading]
- acute responses to endurance exercise [no reading]
- chronic responses (training adaptations) to endurance exercise [no reading]
- electrocardiography & graded exercise testing [ACSM 441-448, 81-94] [Thaler - entire book]
- body composition, resting & exercise metabolism estimations [ACSM 69-80]
- exercise prescription for both healthy & impaired persons [ACSM 143-179]
- teaching of writing skills related to the creation of research reports in Applied Exercise Physiology

EVALUATION: note that written assignments (bolded) account for 30% of the final grade

		Points (500 total)
Exam 1	Cardiorespiratory concepts & exercise responses, pathophysiology	100
Exam 2	Electrocardiography	100
Exam 3	Graded exercise testing & exercise prescription (comprehensive)	100
Exam 4	Take home written case study	30
Lab	Small writing assignments	15
Lab	Written reports of lab assignments	105 (35 points each)
Lab	Practical Exam	50

Exams and Labs: Exam dates will be announced at least one and a half weeks in advance in consultation with the students. The first 3 exams will be in multiple choice format and consist of 33 questions worth 3 points each (100 point total, students given 1 point on each exam for being Aggies). Exam content will cover material in both lecture and reading assignments. Exams will be conducted via E-mail. Make-up exams and labs will be given only under extenuating circumstances and, in accordance with university absentee policy, at the sole discretion of the instructors.

Note: KINE 439 is a writing intensive course, therefore, effectiveness of written communication will be considered as 50% of the grade for each laboratory assignment, with another 50% based on accuracy of content. This is not a creative writing course! We will focus on technical writing skills and data presentation important to exercise specialists. Specifically, 50% of the grade for each lab assignment will include the student's proper and effective use of grammar, mechanics, format and usage as well as the quality of argument and critical thought in responding to the instructor's questions. Additionally, this means that the students will spend class time in activities designed to enhance their writing, such as drafting, revising, and proofreading. **(Writing enhancement resources <http://uwc.tamu.edu>)**

Lab topics

- Assessment of Blood Pressure and Cholesterol
- Assessment of Body Composition
- Muscular Strength and Power
- Maximal and Submaximal Graded Exercise Tests with 12 lead ECG's

Grades:

Grades will be assigned strictly on the basis of the final numerical average of the student's accumulated point totals according to the percentages given below. Decimal points of .50 or greater will be rounded to the next highest integer. Incompletes (I's) will be given only in extenuating circumstances and will be strictly in accordance with university policy at the discretion of the instructors.

Final Grade Calculated On a Percentage Of Total Points (400) As Follows:
90-100%=A 80-89%=B 70-79%=C 60-69%=D Below 60% = F

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.