

Advanced Physiology of Exercise

KINE 5320

Department of Kinesiology, UTA

Fall 2018

Lecture Instructors: Michael Nelson, Ph.D.

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Hours: Open Door Policy or
By Appointment

Lecture Instructors: Rhonda Prisby, Ph.D.

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Faculty Profile:

Office: 238 Life Sciences

Hours: Fri 1:00-3:00 or
By Appointment

Course: KINE 5320 Adv. Ex. Physiol.

Credit: 3 semester credit hours

Time and Place of Class Meetings: ARCH401, Monday 2:00-4:50 pm

Textbook: Advanced Exercise Physiology, Essential Concepts and Applications by Ehrman, Kerrigan, Keteyian will be used as the primary reference text with selected readings to be assigned as needed.

Course description:

Lectures are designed to investigate concepts of energy metabolism, lactate production and accumulation, energy expenditure, excess post exercise oxygen consumption, cardiovascular and temperature regulation, neuromuscular control, aerobic and anaerobic adaptations and ergonomics.

Student Learning Outcomes:

Students will gain a comprehensive understanding of exercise physiology in an integrative fashion. Content will be delivered in the lecture.

Requirements: Students are expected to attend lectures and participate in classroom discussions.

Grading: Nelson

Class participation: 10.0%

Exam 1: 20.0%

Exam 2: 20.0%

Grading: Prisby

Class participation: 10%

Exam 3: 20%

Exam 4: 20%

Final Grading

100-89.5%	A
89.49-79.5%	B
79.49-69.5%	C
69.49-59.5%	D
<59.49%	F

*Grading policy subject to change. All enrolled students will be formally notified upon changes made to the grading policy during the semester.

Class Participation

Class Participation includes, but is not limited to the following: group discussions, written questions & answers and comments during lectures, etc.

Attendance: Attendance for the lecture component of the course, although not required, is strongly encouraged.

AMERICANS WITH DISABILITIES ACT: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Academic Integrity: Students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with

University policy, which may result in the student's suspension or expulsion from the University.

Student Support Services Available: The University of Texas at Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. These resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals to resources for any reason, students may contact the Maverick Resource Hotline at 817-272-6107 or visit www.uta.edu/resources for more information.

Electronic Communication Policy: The University of Texas at Arlington has adopted the University "MavMail" address as the sole official means of communication with students. MavMail is used to remind students of important deadlines, advertise events and activities, and permit the University to conduct official transactions exclusively by electronic means. For example, important information concerning registration, financial aid, payment of bills, and graduation are now sent to students through the MavMail system. All students are assigned a MavMail account. *Students are responsible for checking their MavMail regularly.* Information about activating and using MavMail is available at <http://www.uta.edu/oit/email/>. There is no additional charge to students for using this account, and it remains active even after they graduate from UT Arlington.

FINAL REVIEW WEEK: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabi. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. Classes are held as scheduled during this week and lectures and presentations may be given.

E-CULTURE POLICY: You may email me at any time if you need information.

The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly

TIMELINE FOR GRADE GRIEVANCES: The student has one calendar year from the date a grade is assigned to initiate a grievance. The normal academic channels are

- 1) Department Chair, 2) Academic Dean, and 3) the Provost.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, [which is located \[insert a description of the nearest exit/emergency exit\]](#). When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

<https://www.uta.edu/policy/procedure/7-6>

Lecture Schedule

The lecture schedule may change according to available time.

Nelson	
Aug 27	Exercise Metabolism
Sept 3	No Class – Labor Day
Sept 10	Exercise Metabolism
Sept 17	Dynamics of skeletal-neuromuscular and gastrointestinal physiology
Sept 24	Exam 1
Oct 1	Cardiovascular Function and Control
Oct 8	Pulmonary Exercise Physiology
Oct 15	EXAM 2
PRISBY	
Oct 22	Immune and Endocrine System
Oct 29	Principles for testing and training for aerobic power
Nov 5	Principles for testing and training: Aerobic strength, power and range of motion
Nov 12	EXAM 3
Nov 19	Body Composition and weight management; Performance: Environmental stressors, genetics, nutrition, and ergogenic aids
Nov 26	Physical Activity and Exercise for Health and Fitness
Dec 3	Exam 4