Introduction to Exercise Science KINE 1400 Lecture and Laboratory Spring 2018

Lecture Instructor: David M. Keller, Ph.D. **Office:** 155A MAC

Phone: 817-272-3288 **Hours:** By Appointment Only

e-mail: kellerd@uta.edu

Faculty Profile: https://www.uta.edu/profiles/david-keller Course: KINE 1400 Introduction to Exercise Science

Credit: 4 semester credit hours

Time and Place of Class Meetings: Lone Star Auditorium, MAC 206 Tues-Thurs 11:00-12:20pm

Labs meet in room Exercise Science Laboratories, MAC 223

Graduate Assistant Tutoring: Hours TBA

Description of Course Content: Lectures, labs and assignments are designed to introduce students to the field of exercise science and resources outside the classroom available for additional study. An overview includes topics on acute and chronic physiological responses to exercise, nutrition, biomechanics, health-related concepts and physical fitness, as well as statistics. Students will also gain knowledge in the use of spreadsheets for analyzing data and creating charts.

Student Learning Outcomes:

The student will be able to perform blood pressure and body fat analysis as part of a fitness testing program. The student will be able to develop a cardiovascular and resistance training program for a client.

The student will be able to explain the acute and chronic effects of exercise on the cardiovascular system.

The student will be able to explain the acute and chronic effects of exercise on the musculoskeletal system.

The student will be able to identify the different effects that exercise has on special populations, such as, children, elderly, diseased, et cetera.

The student will be able to understand the different effects that exercise has on male and females.

The student will be able to explain and identify statistical terms and their use in Kinesiology

The student will be able to obtain data in the lab and evaluate that data through graphing.

The student will be able to identify the three main planes of movement.

Requirements: Basic computer skills and an understanding of the Microsoft Excel program. Students are required to attend lectures and participate in all laboratory assignments.

Required Text:

- 1. Howley & Thompson (2017). <u>Fitness Professionals Handbook</u>, 7th Edition. Publisher: Human Kinetics.
- 2. <u>Introduction to Exercise Science Lab Manual KINE 1400</u>. This is obtained from your lab instructor.

https://www.uta.edu/conhi/students/kinesiology-lab.php

^{*} Basic calculator is required (scientific calculator not necessary)

GRADING:

Exam 1	February 13	15%
Exam 2	March 8	20%
Exam 3	April 10	20%
Exam 4	May 8	20%
Weekly Lab Assignments-Due in lab, or the next week		

$$(A = 90-100\%, B = 80-89\%, C = 70-79\%, D = 60-69\%, F < 60\%)$$

Test dates are subject to change. Changes in test dates will be announced in class and by way of email. It is not the instructor's responsibility to compute your grade throughout the semester. To compute your grade, take the total points earned for a specific part of the evaluation (exams, etc.) divided by points possible and multiply the points allotted for that part of the course by the percentage of total point earned in that section. Do the same for each part of the course grade and add the parts together, that is your score out of 100%.

Attendance: At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, I have established that, for the lecture component of the course, although not required, attendance is strongly encouraged.

Major Exams (15, 20, 20 and 20%): Each exam will consist of multiple choice tests based on assigned readings and lectures (see lecture schedule). There will be no make-ups for missed major exams, except for university excused absences that must be turned in one week prior to the exam. However, in cases of extreme emergencies contact the instructor before the exam and your situation will be considered for approval or denial. Without notification, your absence on exam day gives you a zero grade for the exam. Unless you have a university excused absence, even with notification there is no guarantee that you will be allowed to make up the exam.

You will need your UTA ID, a Scantron (882-E) and a #2 pencil for each of the major exams. *Bring the minimum to class on exam days. You will leave all of your belongings outside of the room. No hats, head coverings, players or cell phones will be allowed on exam days.

Cheating is not allowed. Cheating will result in a zero grade for the exam.

CONDUCT IN LECTURE: Failure to comply with conduct guidelines will result in expulsion from the class that day or a zero on the lab assignment that week.

During the lecture students are expected to:

No video or audio recording allowed without permission from the instructor

Have cell phones turned off and put up. No text messaging will be allowed.

No headphones with music players are allowed.

Laboratory Attendance Policy: Lab attendance is mandatory. You must be present in lab to obtain data for the assignments. Lab data will not be given to students who do not attend lab unless they have a documented & approved University excused absence.

Examples of Lab Absences include, but are not limited to the following:

Not attending or arriving >10 minutes late. If you arrive late for lab you will not be allowed to participate. Leaving lab early before the instructor dismisses class.

Not being properly dressed out for lab. Loose T-shirt or tank top, above the knee shorts, and running/tennis shoes are required for lab.

Refusal to participate in lab activities (example: exercising, taking blood pressures and body fat analysis, being a subject for others, etc.).

NOTE: Leaving lab early will result not only in an absence for the day but also a zero on the assignment you are to turn in the following week.

NOTE: Documentation for absences will not be accepted more than one week after the absence.

It is your responsibility to bring your student ID with you to every lab class so that you can have access to the Mavericks Activities Center when needed and for test day. You are not allowed access to the Exercise Science Research Lab in open toe shoes.

WEEKLY LAB ASSIGNMENTS (20%): <u>All lab assignments</u> will be turned in at the beginning of the class period on the due date. Lab assignments will not be accepted without a cover sheet. Lab assignments will always be due at the beginning of class one week from the date of completion of the data collection.

NO LAB ASSIGNMENTS WILL BE ACCEPTED AFTER THE FIRST 10 MINUTES OF THE LAB CLASS. IF YOU MISS A LAB WITH AN UNEXCUSED ABSENCE YOU WILL GET A ZERO FOR THAT ASSIGNMENT.

A university excused absence or documentation (i.e., University approved activity, proof you were in jail, doctor's note on appropriate letterhead with appropriate signature) is required in order to have consideration for make-up of a lab absence.

TWO LAB PRACTICALS (2.5% each, or 5%):

Attendance is required for the two lab practicals. Absences will follow the same guidelines as outlined for major exams in this syllabus.

GRADE REQUIREMENTS FOR KINESIOLOGY CLASSES:

As stated in the undergraduate catalog, if you are on track to obtaining a Bachelor of Science in Exercise Science or a Bachelor of Arts (all level teacher certification) degree, you are required to earn a C or better in Kinesiology 1400 to maintain your status as a Kinesiology major. Therefore, you will be required to retake Kinesiology 1400 if you earn a D or F. This class must be taken at UTA. If you have any questions regarding this policy, please contact your academic advisor Additional information may be found at: http://www.uta.edu/catalog/departments/education/kinesiology

KINESIOLOGY DEPARTMENT DROP POLICY: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. Contact the Financial Aid Office

for more information. Any student that does not officially drop the class by the appropriate drop dates will be given an "F" for the course.

Disability Accommodations: UT 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)*, *The Americans with Disabilities Amendments Act (ADAAA)*, and *Section 504 of the Rehabilitation Act*. 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 disability. Students are responsible for providing the instructor with official notification in the form of a **letter certified** by the Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting: **The Office for Students with Disabilities, (OSD)** www.uta.edu/disability or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability.

<u>Counseling and Psychological Services, (CAPS)</u> <u>www.uta.edu/caps/</u> or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

Non-Discrimination Policy: The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos.

Title IX Policy: The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. *For information regarding Title IX, visit* www.uta.edu/titleIX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or imhood@uta.edu.

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.

The IDEAS Center (2nd Floor of Central Library) offers **free** tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. To schedule an appointment with a peer tutor or mentor email IDEAS@uta.edu or call (817) 272-6593.

The English Writing Center (411LIBR): [Optional.] The Writing Center Offers free tutoring in 20-, 40-, or 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Our hours are 9 am to 8 pm Mon.-Thurs., 9 am-3 pm Fri. and Noon-6 pm Sat. and Sun. Register and make appointments online at http://uta.mywconline.com. Classroom Visits, workshops, and specialized services for graduate students are also available. Please see www.uta.edu/owl for detailed information on all our programs and services.

The Library's 2nd floor Academic Plaza offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library's hours of operation. http://library.uta.edu/academic-plaza

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.

To obtain your NetID or for logon assistance, visit https://webapps.uta.edu/oit/selfservice/. If you are unable to resolve your issue from the Self-Service website, contact the Helpdesk at helpdesk@uta.edu.

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.

Grade Grievance: 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) Department Grievance Committee, 3) Academic Dean

Campus Carry: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit http://www.uta.edu/news/info/campus-carry/

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.

Departmental Tutoring Services

The Department of Kinesiology provides free tutoring services to students enrolled in KINE 1400 Intro to Exercise Science. Your course instructor will provide you with the scheduled dates and times of the tutoring sessions. Students are encouraged to take advantage of this service **EARLY** in the semester **PRIOR** to receiving a poor grade. The Department of Kinesiology wants to help you be successful in your academic career, but you must be proactive in taking advantage of this valuable resource.

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

Spring 2018, KINE 1400 Lecture Schedule	Lone Star Auditorium	Mavericks Activity Center
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Week I	<u>Topic</u>	
January 16, 18	Introduction to course	
January 10, 10	Chapter 1 – Health, Fitness and Performance, Chapter 2 – Health Risk Appraisal	
Week 2		
January 23, 25	Chapter 2 cntd. Chapter 4 Exercise Physiology	
Week 3		
Jan 30, Feb 1	Chapter 4 cntd. Chapter 4 cntd.	
Week 4	•	
February 6, 8	Chapter 24 –ECG and Exercise Performance Chapter 24 cntd., Review for Exam 1	
Week 5	•	
February 13, 15	Exam 1 (15%) - Tuesday (February 13) Chapters 1, 2, 4, 24 Chapter 11 – Exercise Prescription for Cardiorespiratory Fitness	
Week 6		
February 20, 22	Chapter 11 cntd. Chapter 13 – Exercise Prescription for Muscular Fitness	
Week 7	•	
February 27, Mar 1	Chapter 16 - Exercise for Children and Youth Chapter 8 – Assessment of Body Composition	
Week 8		
March 6, 8	Chapter 8 cntd., Review for Exam 2 Exam 2 (20%) - Thursday (March 8) Chapters 8, 11, 13, 16	
Week 9		
March 13, 15	SPRING BREAK SPRING BREAK	
Week 10		
March 20, 22	Anaerobic Power Lecture (not in textbook) Chapter 22 - Exercise, Asthma, and Pulmonary Disease	
Week 11	•	
March 27, 29	Chapter 17 – Exercise and Older Adults Chapter 19 – Exercise and Coronary Heart Disease	
Week 12	<u> </u>	
April 3, 5	Chapter 12 - Exercise Prescription for Weight Management Review for Exam 3	
Week 13		
April 10 <mark>, 12</mark>	Exam 3 (20%) – Tuesday (April 10, Anaerobic Power Lecture, Chapters 12, 17, 19, 22 Chapter 21 – Exercise and Diabetes	
Week 14	•	
April 17, 19	Chapter 21 cntd. Chapter 5 - Nutrition	
Week 15	•	
April 24, 26	Research-related Lecture (not in textbook) Chapter 3 – Functional Anatomy and Biomechanics	
Week 16	•	
May 1, 3	Chapter 3 – cntd. Review for Exam 4	
Week 17		
May 8	Exam 4 (20%) - Date/Time - TBA Chapters 3, 5, 21, Research-related Lecture	

NO FOOD OR DRINK OF ANY KIND ALLOWED IN THE 1400 LAB ROOM. Spring 2018, KINE 1400 Lab Schedule - All labs will be in room 223 MAC

Date	Topic	Assignment
Week 1		Assignment
January 15-17	NO 1400 LABS THIS WEEK DUE TO Tuesday start da	
Week 2	·	Assignment
January 22-24	Lab #1, Resting Heart Rate and Blood Pressure, Page 2	(100 points) Complete 10 blood pressures
Week 3		Assignment
January 29-31	Lab #2, Flexibility Overview, Page 7	(100 points)
	,	Complete 5 blood pressures
Week 4		Assignment
February 5-7	Lab #3, Fitness Pre-Testing, Page 11	(100 points)
		Complete 5 blood pressures
Week 5		Assignment
February 12-14	Lab #4, Spreadsheet Lab, Page 13	(100 points)
.•	**Bring a laptop to lab if you have one	Practice blood pressures if you have
time		
Week 6	T 1 11 T 17 17 17 17 17 17 17 17 17 17 17 17 17	Assignment
February 19-21	Lab #5, Ventilatory Response to Exercise, Page 17	(100 points)
Week 7		Complete 5 blood pressures
.,	DLOOD BRESSURE BRACTICAL D 54	Assignment
February 26-28 grade)	BLOOD PRESSURE PRACTICAL , Page 54	(2.5% of total class grade, 10% of lab
Week 8		Assignment
March 5-7	Lab #6, Estimation of Body Composition from Skinfolds	(100 points)
	Page 22	Perform 5 Skinfold Tests
Week 9		Assignment
March 12-16	Spring Break	
Week 10		Assignment
March 19-21	Lab #7, Steady State Response to Exercise	(100 points)
	Page 27	Perform 5 Skinfold Tests
Week 11		Assignment
March 26-28	Lab #8, Anaerobic Power, Page 31	(100 points)
	, , ,	Perform 5 Skinfold Tests
Week 12		Assignment
April 2-4	Lab #9, Prediction of VO ₂ max and Metabolic Responses	(100 points)
	Page 36; Introduce lab 10	Perform 5 Skinfold Tests
Week 13		Assignment
April 9-11	SKINFOLD PRACTICAL, Page 55 Answer questions about Lab 10	(2.5% of total class grade, 10% of lab grade)
Week 14	•	Assignment
April 16-18	Lab #10, Refereed Article Review, Page 43	(100 points)
Week 15		Assignment
April 23-25	Lab #11, Fitness Post Testing, Page 45	(100 points)
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Week 16		Assignment
April 30-May 2	No Labs this week due to Research Day on May 4	

Introduction to Exercise Science KINE 1400 Laboratory Syllabus Spring 2018

Lab Instructor: Brad Heddins, M.S. **Office:** 149 Maverick Activities Bldg

Phone: 817-272-1335 Hours: By Appointment

e-mail: heddins@uta.edu

Web site: https://mentis.uta.edu/explore/profile/brad-heddins

Course: KINE 1400, All Lab Sections, Introduction to Exercise Science

Time and Place of Class Meetings: Room 223* MAC

CONDUCT IN LAB: Failure to comply with conduct guidelines will result in expulsion from the class that day or a zero on the lab assignment that week. During the lab students are expected to:

Have cell phones turned off and put up. No text messaging will be allowed. No headphones with music players are allowed. Laptops are allowed provided they are not a distraction to those around you.

**You are not allowed to bring your children to the lab room. In addition they cannot be left outside the room unattended to wait for the class to be over

Examples improper participation includes but is not limited to:

Leaving class or lab early before the instructor dismisses class.

Sleeping, reading the paper, working on other assignments, watching videos or other inattentive activity.

Laboratory Attendance Policy: Lab attendance is mandatory. Being absent means that you will receive a zero for that lab and the lab assignment that was to be turned in the next week. You must be present in lab to obtain data for the assignments. Lab data will not be given to students who do not attend lab unless they have a documented & approved University excused absence. Your instructor will give you separate lab data if you miss the lab for a university excused absence.

Examples of Lab Absences include, but are not limited to the following:

Not attending or arriving \geq 10 minutes late. If you arrive late for lab you will not be allowed to participate. Leaving lab early before the instructor dismisses class.

Not being properly dressed out for lab. Loose T-shirt or tank top, above the knee shorts, and running/tennis shoes are required for lab.

Refusal to participate in lab activities (example: exercising, taking blood pressures and body fat analysis, being a subject for others, etc.).

NOTE: Leaving lab early will result not only in an absence for the day but also a zero on the assignment you are to turn in the following week.

NOTE: Documentation for absences will not be accepted more than one week after the absence.

It is your responsibility to bring your student ID with you to every lab class so that you can have access to the Mavericks Activities Center when needed and for test day. You are not allowed access to the Kinesiology Labs in open toe shoes.

WEEKLY LAB ASSIGNMENTS (20%) + (2 Lab Practicals – 2.5% each= 5%), Total Lab 25%: All lab assignments will be turned in at the beginning of the class period on the due date. Lab assignments will

not be accepted without a cover sheet. <u>Lab assignments</u> will always be due at the beginning of class one week from the date of completion of the data collection. NO LAB ASSIGNMENTS WILL BE ACCEPTED AFTER THE FIRST 10 MINUTES OF THE LAB CLASS. IF YOU MISS A LAB WITH AN UNEXCUSED ABSENCE YOU WILL GET A ZERO FOR THAT ASSIGNMENT.

A university excused absence or documentation (i.e. University approved activity, proof you were in jail, doctor's note **on appropriate letterhead with appropriate signature**) is required in order to have consideration for make-up of a lab absence.

<u>Cheating in lab is not allowed</u>. Cheating will result in a zero being given to all parties involved regardless of the intent. You will be written up for Academic Dishonesty. The file will then be forwarded to the Office of Student Conduct for disciplinary action. If you wish to contest the cheating incident you will need to contact the Office of Student Conduct. Cheating includes, but is not limited to: copying from others or providing to others lab graphs and answers or copying off data in lab that you did not obtain.

TWO LAB PRACTICALS – (2.5% each or 5%):

Attendance is required for the two lab practicals. Absences will follow the same guidelines as outlined for major exams in this syllabus.

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

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