

The University of Texas at Tyler
Department of Health and Kinesiology

Course Syllabus - KINE 5319: Aging and Physical Performance
Section 060 - Virtual (3 semester credit hours)
Spring 2021

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VIRTUAL Office Hours: By appointment only.

Course meeting times and location: ONLINE (asynchronous) via Canvas

Important: Please read this syllabus carefully and in its entirety before you do anything else in the course. Note important details, but especially take note of the categories of information in this syllabus. The syllabus is intended to provide key information at the outset of the course, as well as throughout the entire semester. I strongly recommend that you refer to the syllabus frequently throughout the course. After your initial reading of this syllabus, I recommend that you check the various links in the course (in Canvas) to start to familiarize yourself with "what is where."

COURSE DESCRIPTION, GOALS AND LEARNING OUTCOMES:

Course description: This course is concerned with the process of aging as it affects physical activity. Each student will develop a good working knowledge of the physiological, psychological and socio-economic issues affecting the fitness levels of older adults.

The present course is designed to give students the knowledge and understanding necessary to examine the prevailing theories of biological aging and survey the effects of aging on exercise capacity, exercise training adaptations, and overall functional capacity. Students will read and synthesize current research articles examining both the mechanisms of aging and the efficacy of exercise training to maintain functional capacity over the lifespan. The course will be concluded by examining pertinent components of exercise programs for older individuals.

Course Goal: The student should learn the basic theories of aging and distinguish the true physiological aging effects from inactivity-related effects commonly observed in the aging population. The concept of healthy aging will be defined, and the role of exercise training in healthy aging will be explored.

Rationale: Programs of physical activity for older adults are increasing locally, nationally, and internationally. An understanding of the aging process is essential for those who work with activity programs for mature adults.

Specific Learning Outcomes

The successful student will be able to:

1. Explain the prevailing theories of human aging.
2. Identify the primary effects of aging on physiological systems with emphasis on musculoskeletal and motor performance.
3. Distinguish between true aging effects on human physiology and age-associated physical changes due to inactivity.
4. Analyze the potential for exercise training to maintain physical function during aging and support healthy aging.

5. Identify and explain the primary program variable modifications necessary for safe and effective exercise prescriptions for older adults.
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COURSE STRUCTURE:

You will find that this class is very similar to a traditional on-campus class in that it will consist of readings (e.g., notes, articles), review of research literature, discussions, written assignments, and exams. In contrast to a traditional on-campus class, assignments in this course can be completed asynchronously. In other words, there will be no scheduled meeting times in this class. You may access course content and complete assignments at your convenience, ***though you still must meet assignment and testing deadlines.***

GENERAL INFORMATION

Course Outline:

Very important information is provided in Canvas. You will find information about assigned readings, assignments and other important information. In short, Canvas is a major hub for accessing course information. Please familiarize yourself with this hub at the beginning of the course; you will use it a lot throughout the course.

Discussions:

Online discussions and/or conferences are an essential component of this course. To do well in the course, you must participate regularly and insightfully in the online discussions. *To stay abreast of discussions, I strongly recommend that you check the discussion forums at least three times each week and preferably every day.* Participation in discussions is so important that you will receive points toward your course grade based on the quantity, and especially the quality, of your participation. More information related to online discussions, including details of grading of participation, is presented later in this syllabus.

Assignments:

With possible exceptions, assignments requiring student responses in one form or another will be accessible in the Assignments area in the course (i.e., accessible via the Assignments link). In this area, you have access to my detailed description of, and instructions for, each assignment, including the specific required activity and product, and access to an area for you to submit comments or final products (if the assignment calls for this). This area allows you to post information directly, much like in a discussion forum, or to upload (copy) products as attachments.

Note very carefully: I am a stickler regarding completing and submitting assignments as instructed, so please pay close attention to assignment instructions. Doing exactly what is instructed for a given assignment will greatly improve your chances of getting a good grade on the assignment. Close attention should also be paid to the method of submitting completed assignments. Different assignments will be submitted in different ways, including uploading (copying a file) in the Assignments area of the course, posting in a designated forum on the discussion board, and sending as an email attachment. Be sure to submit each completed assignment according to that assignment's instructions.

COURSE REQUIREMENTS AND EVALUATIONS: Some modifications may be necessary due to time, facility, and /or equipment constraints.

Exams: There are two (2) major exams this semester (***the mid-term and the final***). ***The final exam will be cumulative (i.e., comprehensive).*** The exams will be based upon material covered in the reading assignments, lectures, discussions, etc. Questions on the exams will be subjective (i.e., essay-type questions).

Assignments: Each unit has several assignments. Some of these assignments will be written assignments to be uploaded to Canvas and some will be discussion board posts. The details regarding completion and submission of these assignments will be given in each section. I am particular regarding formatting of assignments; therefore, it is in your best interest to read the formatting and submission guidelines carefully and to complete your assignments accordingly. All work turned in will be graded with rigor appropriate for graduate level standing.

Discussion Board Activity: Due to the online nature of the course, interaction with students and the instructor will occur through the discussion board. The discussion board will be used to allow you to demonstrate your comprehension of the course material and your ability to communicate that comprehension through writing. Throughout the semester, you will be required to respond to questions about the reading assignments, lectures, homework assignments, or current topics in training methods. It is expected that you will read others' posts and think critically and logically about the question before offering your insights or thoughts. Your posts and responses should have a logical flow, be free of grammatical and spelling errors, and should cite your sources properly where needed. Finally, all posts and responses should further the discussion or add clarity to the discussion. Your posts should be made in a timely manner, so that others may respond and continue the discussion. Your responses will be graded on the basis of the quantity and "**quality**" of your participation.

When posting to the discussion board, please follow these additional guidelines:

- You are expected to complete the reading assignments *prior* to participation in discussions, unless the assignment states otherwise.
- Please do not repeat others' posts or respond with one-phrase "I agree" or "thanks" posts on the discussion board. Since download speeds vary among students in the class, these types of messages can be time-wasting and frustrating. Please use the e-mail feature in the communications tab if you wish to convey these messages.
- Use the Module forums for discussion of questions or issues related to that Module. Use the general questions forum for other questions related to the course (navigation, location of particular items, etc.) or other sports nutrition topics, in general.
- Students should post and respond to discussions in a respectful, professional manner. Please do not ridicule others on the discussion board. The instructor reserves the right to remove any posts that are offensive or that do not pertain to the subject being discussed. "Netiquette" is an emerging concept of social conventions for communicating on-line. Check out <http://www.albion.com/netiquette> for the do's and don'ts of on-line communication.
- Please type your comments directly into the discussion thread window. Do not attach your responses as documents. This makes following a discussion much more difficult. Please save the attachment option for truly lengthy items (as PDF only), reference material, or items (e.g., JPEG images) that cannot be pasted into the discussion post itself. Please only attach appropriate materials.
- The instructor reserves the right to remove any posts that are offensive or that do not pertain to the subject being discussed.

Policy regarding late submission of an assignment: No assignments or discussion posts will be accepted past their deadlines. Since completion of some assignments in this course depend on the completion of previous assignments (e.g., discussion posts), it is imperative that you submit your assignments on time.

Time Requirements: Successful on-line learning is highly student-initiated. Because of the format of the course, the student will be required to exercise initiative and diligence in completing the course. In general, you should expect to spend a similar amount of time completing the requirements of this online course as you would spend on the same course taught in the traditional classroom format. An advantage of the online format is that the lecture material is there for you to review whenever you want. In an online course, more time must be devoted to participation in discussions than is traditionally spent in classroom discussions. Time for completion of assignments, readings and other materials, reviewing for comprehension, and preparing for exams should be similar in this online course as in any other course.

As a rough guide, you should plan to spend approximately 20 - 25 hours per week on this course. The actual amount of time required will, of course, vary from one person to another. It is absolutely essential that you not fall behind.

Although this is an asynchronous course, this is not an individually paced course. Access to course materials, assigned discussions, assignments, exams, and the like will follow a schedule spread out over the semester (similar to a class in the traditional format). There will be set dates for exams and deadlines by which you must complete all unit assignments. You may access the **Course Content** for deadlines.

Missing time during the course: Distance learning courses generally require more time than students typically experience in a traditional face-to-face lecture course. It is recognized that many of the students in this class have responsibilities outside of class that require time, as well. If you encounter any unforeseen circumstances (family emergency, jury duty, etc.) that greatly compromise your coursework, contact the instructor immediately. Alternatives for missed time may be arranged at the discretion of the instructor. **Note:** Vacation time does not count as an excused "absence". Please plan your vacations around assignment due dates or submit your assignments early.

Course Expectations:

- 1) Participate and complete all class activities and learning tasks.
- 2) Barring an act or force of nature (the University being officially closed), assignments and exams will be given at the time and date indicated in the syllabus. Only for extremely extenuating circumstances and only with the prior approval of the instructor will a student be allowed to make up an examination that is missed.
- 3) Pay close attention to assignment instructions and deadlines. Doing exactly what is instructed for a given assignment will greatly improve your chances of getting a good grade. Be sure to work on each assignment BEFORE the due date, not ON the due date. As you are given ample time to complete each assignment, past-due assignments will not be accepted, no exceptions!

Announcements: I will post announcements frequently during the semester. You will be able to see these announcements on your course portal page. Please check these frequently so you do not miss any important information.

E-mail communication / feedback from me to you:

Instructors are required to use your Patriots account e-mail address for e-mail correspondence. Therefore, any e-mail message originating from me will be sent to your Patriots account. The instructor will not send and/or reply any e-mails to private accounts such as yahoo, Gmail, Hotmail, etc. You may want to set up your personal e-mail account so that it pushes your Patriots account e-mail to your personal inbox.

Due to teaching and research loads and the size of this class, it may take me a day or two to respond to e-mail; however, I will make every effort to respond to e-mail on the same day. Please note that emails received on the weekends (late Friday through early Monday) will generally be responded to on the following Monday. I realize feedback on your work is very important and I will strive to give timely feedback on all assignments. You should expect feedback on discussion board posts within a week and feedback on papers and exams within 2 - 3 weeks (I will notify you if I expect feedback to take a little longer for a particular assessment).

E-mail communication from you to me:

In all e-mail correspondence, you must 1) use your Patriot email account instead of a personal email (or it will end up in spam/junk emails). 2) Include the course name in the subject line (e.g., "KINE 5319 question" or "KINE 5319 assignment"). Please do not send me an e-mail with "class question" in the subject line - I'm teaching many classes this semester and I don't have time to try to find out which class you are asking about. 3) Use salutation and my professional credential (i.e., Dr. Arce-Esquivel). 4) Please

note that I do not respond to emails between Friday late afternoon till Monday morning. Fail to follow these instructions may delay the response time.

Library services:

UT Tyler's Muntz Library may be accessed via <http://library.utt Tyler.edu/>. A link to the Muntz Library is also available on UT Tyler's Home Page (www.utt Tyler.edu).

Technical support:

Since I am unable to offer technical assistance, do not contact me if you have technical difficulties. Instead, contact CANVAS which provides technical support for this course. Information about technical support is available from the CANVAS global menu (Help).

UT Tyler's IT Support department provides technical support for this online course. Information about technical support for Canvas and this online course is available on your Canvas login page (<http://www.utt Tyler.edu/canvas/index.php>). You are welcome to inform me if you have technical difficulties, but I will not likely be able to assist with such difficulties.

Quality of work: All written work, including exams and assignments, must be written legibly or typed according to the assignment instructions. All work turned in will be graded with rigor appropriate for graduate-level standing.

Copyright: All handouts used in this course, including those delivered via Canvas, are copyrighted. The term "handouts" refers to all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, PowerPoint slides, outlines, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

IMPORTANT: *Monday, March 29th is last day to withdraw from class with automatic grade of W. (Disclaimer: My alerting to this date in this syllabus does not make this UT Tyler's official withdrawal date. You should check UT Tyler's official calendar to verify this date).*

Evaluation: Total 200 points

Midterm Exam	50 points
Final Exam (comprehensive)	60 points
Class Assignments	30 points
Class Discussions	30 points
Aging Topics Paper	30 points

Grading will be based on the following modified scale:

- A** = 180 - 200 points (90 - 100%)
- B** = 160 - 179.98 points (80 - 89.99%)
- C** = 140 - 159.98 points (70 - 79.99%)
- D** = 120 - 139.98 points (60 - 69.99%)
- F** = ≤ 119.98 points (≤ 59.99%)

IMPORTANT DATES:

- January 25 (Monday): Census Date
- March 1: Final Filing Deadline for Spring 2021 Graduation
- March 8 - 13: Spring Break
- March 29: *Last day to Withdraw from Classes*
- April 26 (Monday): Study Day
- April 27 (Tuesday): Final Exam opens**

May 1: Spring Commencement
May 4: Final grades due in Faculty Center by 12:00 p.m.

COURSE CONTENT - SPRING 2021: (some changes could be made during the semester):
The following is a tentative schedule for the timeframe these areas will be covered.

Week 1: (Jan 11 - Jan 15)

Spring semester 2021 begins: Introduction to Course and Overview of Syllabus - Introductory Concepts

Week 2: (Jan 18 - Jan 22)

- The Process of Aging and the Potential for Healthy Aging - Defining Successful Aging
- Aging and Homeostatic Processes - Aging Demographics

Week 3: (Jan 25 - Jan 29)

- The Process of Aging and the Potential for Healthy Aging - Defining Successful Aging
- Aging and Homeostatic Processes - Aging Demographics

Week 4: (Feb 1 - Feb 5)

- Theories of Aging: Mutations of Mitochondrial DNA and Aging; Programmed Theories of Aging: The Developmental Theory of Aging; The Endocrine/Immuno Theory of Aging

Week 5 (Feb 8 - Feb 12)

- Theories of Aging: Mutations of Mitochondrial DNA and Aging; Programmed Theories of Aging: The Developmental Theory of Aging; The Endocrine/Immuno Theory of Aging
- Cardiopulmonary System: Age-Related Changes - Cardiovascular Disease

Week 6 (Feb 15 - Feb 19)

- Cardiopulmonary System: Age-Related Changes - Cardiovascular Disease

Week 7 (Feb 22 - Feb 26): EXAM I: Wednesday, February 24th

Week 8 (Mar 1 - Mar 5)

- Cardiopulmonary System: Age-Related Changes - Cardiovascular Disease
- Musculoskeletal System: Age-Related Changes in Biochemical Properties

Week 9 (Mar 8 - Mar 12): SPRING BREAK

Week 10 (Mar 15 - Mar 19)

- Musculoskeletal System: Age-Related Changes in Biochemical Properties
- Nervous System: Age-Related Diseases

Week 11 (Mar 22 - March 26)

- Nutrition, Common Diseases, and Conceptual Framework of Frailty
- The Role of Physical Activity

Week 12 (Mar 29 - Apr 2)

- The Role of Physical Activity
- Physiologic Adaptability to Training and Physical Activity: Exercise Prescription and Training for Fitness in Older Adults

Week 13 (Apr 5 - Apr 9)

- Physiologic Adaptability to Training and Physical Activity: Exercise Prescription and Training for Fitness in Older Adults

Week 14 (Apr 12 - Apr 16)

- Physiologic Adaptability to Training and Physical Activity: Exercise Prescription and Training for Fitness in Older Adults

Week 15 (Apr 19 - Apr 23)

- Physiologic Adaptability to Training and Physical Activity: Exercise Prescription and Training for Fitness in Older Adults

Week 16 (April 26 - Apr 30): EXAM II (FINAL EXAM (i.e., comprehensive): Tuesday, April 27th)

I RESERVE THE RIGHT TO MODIFY THIS SYLLABUS AT ANY TIME. THEREFORE, YOUR ATTENDANCE AND ATTENTION TO THE ANNOUNCEMENTS IN CANVAS ARE CRUCIAL BECAUSE IT WILL ASSIST YOU REMAIN CURRENT ON THE MATERIAL AND KNOW WHEN THE SYLLABUS MAY BE MODIFIED.

I embrace honor and integrity. Therefore, I choose not to lie, cheat, or steal, nor to accept the actions of those who do (The UT Tyler Honor Code)

SELECTED UT TYLER STUDENT POLICIES

(From the *Handbook of Operating Procedures* and the UT Tyler Website)

Students Rights and Responsibilities

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: <http://www.uttyler.edu/wellness/rightsresponsibilities.php>

Campus Carry

We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <http://www.uttyler.edu/about/campus-carry/index.php>

UT Tyler a Tobacco-Free University

All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors.

Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products.

There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free

Grade Replacement/Forgiveness and Census Date Policies

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. (For Fall, the Census Date is Sept. 12.) Grade Replacement Contracts are available in the Enrollment Services Center or at <http://www.uttyler.edu/registrar>

Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions of which students need to be aware. These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a “W” grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

State-Mandated Course Drop Policy

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).

Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

Student Accessibility and Resources

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit <https://hood.accessiblelearning.com/UTTyler> and fill out the New Student application. The **Student Accessibility and Resources (SAR)** office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director Student Services/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at <http://www.uttyler.edu/disabilityservices>, the SAR office located in the University Center, # 3150 or call 903.566.7079.

Student Absence due to Religious Observance

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

Student Absence for University-Sponsored Events and Activities

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

Social Security and FERPA Statement

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

Emergency Exits and Evacuation

Everyone is required to exit the building when a fire alarm goes off. Follow your instructor’s directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

Student Standards of Academic Conduct

Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

i. “Cheating” includes, but is not limited to:

- copying from another student’s test paper;

- using, during a test, materials not authorized by the person giving the test;
 - failure to comply with instructions given by the person administering the test;
 - possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed “crib notes”. The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test;
 - using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;
 - collaborating with or seeking aid from another student during a test or other assignment without authority;
 - discussing the contents of an examination with another student who will take the examination;
 - divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructor has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student;
 - substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;
 - paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program;
 - falsifying research data, laboratory reports, and/or other academic work offered for credit;
 - taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and
 - misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.
- ii. “Plagiarism” includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another’s work and the submission of it as one’s own academic work offered for credit.
- iii. “Collusion” includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty.
- iv. All written work that is submitted will be subject to review by SafeAssign™, available on Canvas.

UT Tyler Resources for Students

- UT Tyler Writing Center (903.565.5995), writingcenter@uttyler.edu
- UT Tyler Tutoring Center (903.565.5964), tutoring@uttyler.edu
- The Mathematics Learning Center, RBN 4021, this is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.
- UT Tyler Counseling Center (903.566.7254) www.uttyler.edu/counseling