University of Texas at Tyler Department of Health and Kinesiology Nutrition and Functional Foods for Healthy Aging Course Syllabus: Spring 2025 KINE 5325.001

Instructor:

Madhura Maiya, PhD. Office – HPC 3100 and via Zoom Meetings Office Hours: By appointment E-mail: mmaiya@uttyler.edu

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

Required Textbook: Nutrition and Functional Foods for Healthy Aging (2017) edited by Ronald Watson. ISBN: 978-0-12-805376-8. Available for free through Robert R. Muntz Library Link:

https://go.openathens.net/redirector/uttyler.edu?url=https://www.sciencedirect.com/book/9780128 053768/nutrition-and-functional-foods-for-healthy-aging

Course Description:

This course reviews the health issues and nutritional needs of older adults, from an optimal health perspective. The nutritional status of older adults for normal nutrition status, therapeutic nutrition, and metabolic pathways of the nutrients, as well as the sociological and physiological factors that impact nutritional status for the older adult are explored. The use of functional foods to mitigate the consequences of aging are explored.

Course Student Learning Outcomes:

By the completion of this course, you will demonstrate knowledge of evidenced-based scientific nutrition principles and use that knowledge to analyze nutrition intake at the individual adult level.

This course is designed for those with some science background, personal interest, or an advanced interest in Nutritional Science. As a student completing this course, the following requirements will be expected of you:

CSLO 1. Describe at least three physiological and functional changes that can occur with age that affect nutritional status.

CSLO 2. Evaluate the use of functional foods in relation to maintaining health during the aging process. CSLO 3. Assess the nutritional status of an adult individual integrating health and chronic disease history, dietary data, knowledge of physiological consequences of nutritional is-sues in relation to the aging process and create a written report that effectively communicates recommendations to an older adult.

In taking this course you must:

Demonstrate math and writing skills by completing assignments.

Use scientific methods to analyze data and draw conclusions from selected readings in scientific literature.

Exhibit computer skills through use of Canvas and completion of assignments.

Course Prerequisites

This course is a graduate level course. The prerequisite for this course is at least 3 credits of undergraduate nutrition or the instructor's permission. You are expected to have a basic under-standing of anatomy and physiology.

Response Policy:

E-mail: Please do not hesitate to e-mail me with any questions. Please allow 48 hours for an email response. However, it will typically be quicker. Include the course number in the subject line. Graded Quizzes, Assignments, Activities, and Exams: Grades will be available within 2 weeks of the due date. Much of the time you will be able to see grades sooner that the times listed. However, there are times when it takes longer to grade some assignments.

If you send me an email and do not have a response from me within 48 hours, <u>please contact me again</u> as it means I did not get the message!

Methods of Instruction

This course will be taught online. Students are actively involved in the integration of knowledge and skills gained in their Nutrition and Functional Foods for Healthy Aging course under the supervision of the instructor. There are expectations of you, as the student, for this course. You will spend approximately 9 to 12 hours for the course each week with online readings, activities and study time. You must have the writing and math skills that are needed for this course.

Writing:

All students must present a professional demeanor in their writing. Students should use correct spelling and punctuation in any correspondence in this course. This includes in emails, discussion boards, and assignments. Students should use APA style of writing for written assignments. Do use the Writing Center to have them edit your written assignments before you submit them. The Writing Center at the University of Texas is a place for all students, faculty, and staff to work on their writing projects and writing skills.

https://www.uttyler.edu/writingcenter/

Grading

Refresher10 pointsFunction of Proteins10 pointsFunction of Carbohydrates10 pointsFunction of Lipids10 pointsFunction of Vitamins10 pointsFunction of Minerals10 pointsNutrient Calculations10 points

Module 1	
Assignment #1Journal Article Review	50 points
Module 2	
Assignment #2 Personal Food and Activity Journal	40 points
Assignment #3 Personal Health Plan	50 points
Module 3	
Assignment #4 Dietary Supplements	50 points
Moduel 4	
Assignment #5 Aging and Protein and Energy project	200 points
Quizzes 4 @ 25 points each	100 points
Discussion Participation	
4 @ 25 points each	100 points
Midterm Exam	100 points
Final Exam	150 points
Total Possible	900 points

Grades: 810–900 points: A 720-809.9 points: B 630-719.9 points: C 540-629.9 points: D <539.9 points: F

There is no "curve." Please note that 809.9 points is a B, NOT an A.

Class Assignments: All items are due by 11:59 pm. Central Standard Time on the assigned due date. No late assignments will be accepted. If you have an issue with a deadline, please contact me prior to the assignment being due.

Late assignments will be penalized 10% for each day they are late. Contact me before the due date if you will be unable to complete it due to being sick, athletics, or emergencies and want to avoid a penalty. A missed quiz or exam without a prior excuse receives an automatic zero. An excused missed quiz or exam must be arranged with the instructor.

Communication:

Canvas: The course will be taught completely online and therefore it is important for each student to have a good understanding of Canvas. A significant part of the course will require for the students to understand the different features and tools that are part of Canvas and will be utilized during the course of this semester. Please check Canvas daily for announcements as well as assignment details. To make sure you are always connected, it might be in your best interest to download the Canvas app to your smart phones and iPads.

Technical Information: If you experience technical problems or have a technical question about this course, you can obtain assistance by emailing itsupport@patriots.uttyler.edu or call 903.565.5555. When you email IT Support, be sure to include a complete description of your question or problem including:

• The title and number of the course

- The page in question
- If you get an error message, a description and message number
- What you were doing at the time you got the error message
- Canvas Help: https://www.uttyler.edu/canvas/

Netiquette Guide:

"Netiquette" is network etiquette, the do's and don'ts of online communication. Netiquette covers both common courtesy online and informal "rules of the road" of cyberspace. Review and familiarize yourself with the guidelines provided. (URL: <u>http://www.learnthenet.com/learn-about/netiquette/index.php</u>

University of Texas at Tyler Policies

UT Tyler Honor Code

Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

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: <u>http://www.uttyler.edu/wellness/rightsresponsibilities.php</u>

Disability/Accessibility Services

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Tyler at Texas offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including non-visible a 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 an Accessibility Case Manager. 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.

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.

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 creditof 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 givingthe 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 instructors has designated that the examination is not tobe 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 foroneself to take a course, a test, or any course-related assignment;
 - paying or offering money or other valuable thing to, or coercing another person toobtain an unadministered test, test key, homework solution, or computer program orinformation about an unadministered test, test key, home solution or computer program.
 - falsifying research data, laboratory reports, and/or other academic work offered forcredit.
 - taking, keeping, misplacing, or damaging the property of The University of Texas atTyler, 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 anotherperson 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 plagiarism software.

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
- UT Tyler Counseling Center (903.566.7254)

Artificial intelligence (AI) Tools use: UT Tyler is committed to exploring and using AI tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.

For this course: This course has specific assignments where artificial intelligence (AI) tools (such as ChatGPT or Copilot) are permitted and encouraged. When AI use is permissible, it will be clearly stated in the assignment directions, and all use of AI must be appropriately acknowledged and cited. Otherwise, the default is that AI is not allowed during any stage of an assignment

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Tentative Course Schedule (the schedule may change if needed):

Week of January 13th through January 26th – Refresher: Nutrition General Principles

Mini refresher of the general functions of Proteins, Carbohydrates, Lipids, Vitamins, Minerals, and how to calculate % kcals.

Complete: 6 activities in Canvas – **Due January 26th View:** Video lectures

Weeks of January 27th through February 16th – Module 1: Overview of Health & Aging

Read: Chapters 1 through 10 in the textbook. View: Video lectures Complete Quiz: Due February 16th Assignment #1: Journal Article Presentation. Due February 16th

Weeks of February 17th through March 9th – Module 2: Nutrients in Health & Aging

Realistic Weight goals, Exercise, Supplements, Eating Patterns
Read: Chapters 11 through 17
View: Video lectures
Complete Quizzes
Assignment #2: Personal Journal, due March 9th.
Assignment #3: Personal Health Plan, Due March 24th.

Midterm Exam (Exam 1): March 9th

March 17-21—Spring Break

Weeks of March 10th through April 6th – Module 3: Dietary Supplements View: Video lectures Read: Chapters 18 through 25 Complete Quizzes Assignment #4: Dietary Supplements Presentation, Due April 6th

Weeks of April 7th through April 27th Module 4: Protein & Energy Read: Chapters 26 through 29 View: Video lectures Complete Quizzes Assignment #5: Aging and Protein and Energy project, Due April 20th

Comprehensive Final (Exam 2): May 2nd