George Mason University College of Education and Human Development School of Kinesiology

KINE 320 – 001 – Principles of Human Nutrition

3 Credits, Fall 2022

Monday and Wednesday 3-4:15; KJH Room 132

Instructor

Name: Meghan K Magee, MS, CSCS, CISSN

Office hours: By Appointment

Office Location: Katherine G. Johnson Hall, Suite 220.

Email Address: <u>mmagee2@gmu.edu</u>

Prerequisites/Corequisites

None

University Catalog Course Description

Assesses dietary habits and patterns in relation to nutrient requirements across the age spectrum and for a variety of populations. Emphasizes weight control, diet in relation to physical activity, and current nutritional controversies.

Course Overview

The course focuses on the basic principles of human nutrition and its practical application to overall health. It is video lecture based in order to elicit thought provoking discussion and emphasize key components of the content. Current topics and cases are presented and discussed throughout the course to help students translate theory into practice.

The first part of the course focuses on the components of a nutritious diet, nutrition standards, macro and micronutrients. The second part of the course explores the relationship of nutrition to health, disease, fitness, ergogenic aids, and obesity as well as nutrition across the age spectrum.

Course Delivery Method

This course will be delivered as a hybrid method (50% in person, 50% online). Monday lectures will be online in an asynchronous format. Wednesday classes will be held face to face. It is expected that videos and readings are completed prior to the face to face meeting on Wednesdays.

Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers click here.
 - To get a list of supported operation systems on different devices <u>click here</u>.
- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- Purchasing and access to Cengage's MindTap software for assignments.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
 - Respondus Lockdown Browser and Monitor
 - Adobe Acrobat Reader
 - Windows Media Player
 - Apple Quick Time Player

Expectations

• Course Week:

Materials for the week will be uploaded by Monday mornings. Readings, video lectures, and any assignments are to be completed prior to meeting Wednesdays.

• <u>Log-in Frequency</u>:

Students should actively check the course Blackboard site and their Mason email for communications from the instructor, class discussions, and/or access to course materials on a daily basis.

• Participation:

Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments both in person and online, and participating in course discussions and group interactions.

• <u>Technical Competence</u>:

Students are expected to demonstrate competence in the use of course technology. Students who are struggling with technical components of the course should seek assistance from Mason Information Technology Services: https://its.gmu.edu/service/its-support-center/.

• Technical Issues:

Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.

• Workload:

Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the course schedule of topics, readings, activities and assignments due.

• <u>Instructor Support</u>:

Students may schedule a one-on-one meeting to discuss course requirements, content, or other course-related issues. Please refer to information provided in the syllabus in order to schedule a time to meet with the instructor, whether via telephone, web conference, or face to face. Students should email the instructor to schedule a one-on-one session.

• Netiquette:

The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students should re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words*. Remember that you are not competing with classmates but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

• Accommodations:

Online learners who require effective accommodations to ensure accessibility must be registered with George Mason University Disability Services (https://ds.gmu.edu/) and provide notification of such to the course instructor.

Learner Outcomes or Objectives

This course is designed to enable students to do the following:

- 1. Differentiate the roles of carbohydrates, protein, fats, vitamins, and minerals in diet across the lifespan.
- 2. Describe the digestive process as it relates to the utilization of nutrients for energy and metabolism.
- 3. Explain the various methods utilized to measure body composition.
- 4. Explain the importance of nutrition as it relates to exercise and physical activity for a healthy lifestyle.
- 5. Evaluate a variety of diets reported in the popular literature.
- 6. Plan a nutrition program for both weight loss and weight gain for clients.

Professional Standards

This course meets the Commission on Accreditation of Allied Health Education Programs (CAAHEP) requirements and covers the following American College of Sports Medicine's Knowledge-Skills-Abilities (KSA's):

Upon completion of this course, students will have met the following professional standards:

KSA	Description
	GENERAL POPULATION/CORE:
	NUTRITION AND WEIGHT MANAGEMENT
1.8.1	Knowledge of the role of carbohydrates, fats, and proteins as fuels for aerobic and
	anaerobic metabolism.
1.8.2	Knowledge of the following terms: obesity, overweight, percent fat, BMI, lean body
	mass, anorexia nervosa, bulimia, metabolic syndrome and body fat distribution.
1.8.6	Knowledge of the difference between fat-soluble and water-soluble vitamins.
1.8.8	Knowledge of the USDA Food Pyramid and Dietary Guidelines for Americans.
1.8.9	Knowledge of the importance of calcium and iron in women's health.

1.8.11	Knowledge of the number of kilocalories in one gram of carbohydrate, fat, protein, and alcohol.
1.8.12	Knowledge of the number of kilocalories equivalent to losing 1 pound of body fat and
	the ability to prescribe appropriate amount of exercise to achieve weight loss goals.
1.8.13	Knowledge of the guidelines for caloric intake for an individual desiring to lose or gain
	weight.

Required Text

<u>MindTap Digital Platform</u> for Sizer, F and Whitney, E. (2019). *Nutrition Concepts and Controversies*, *15th Edition*. Wadsworth Cengage Learning.

- Select Digital Platform, OR if you have other classes using Cengage, select Cengage Unlimited.
- This will give you access to the <u>mandatory MindTap</u> activity program as well as an electronic copy of the textbook.
- This also includes options to purchase/rent a hard textbook.

Course Performance Evaluation

Students are expected to submit assignments on time in the manner outlined by the instructor on Blackboard. No late work will be accepted in this course without <u>a submitted extension request</u> prior to the assignment deadline. Extension requests must be submitted with an explanation as to why the student is unable to complete the assignment on time. No extension requests will be granted if submitted after the assignment deadline. Students are allowed <u>one 24-hour extension</u> during this course. Extensions approved beyond 24 hours are at the discretion of the instructor. Extensions cannot be requested for lab practical, exams or presentations. In dire or extenuating circumstances, students may be allotted additional extensions or make up opportunities at the instructor's discretion.

• Assignments and Examinations

MindTap Assignments (12 assignments @ 10 pts each; 120 points total)

Each individual chapter will include one interactive MindTap assignment. These assignments are to be completed by the due date outlined on the schedule.

Diet Analysis Project (150 points total):

- Throughout the course, you will be encouraged to evaluate your personal eating habits, your personal dietary needs, and create a plan toward making healthier substitutions in compliance with personal goals.
- Part 1 (50 pts) includes recording and logging everything you eat/drink for 3 days into a diet analysis software program within Cengage MindTap.
- Part 2 (100 pts) gives you the opportunity to evaluate your current dietary habits and make specific goals for improvement moving forward, based on what you learned from Part I and throughout the course.

Post-lecture questions (12 @ 3 points each; 36 points total):

Following each lecture there will be a 3-point "quiz" regarding your understanding and/or confusion of the topics covered in the lecture. This will help facilitate the face-to-face meetings.

Entrance quizzes (12 @ 5 points each; 60 points total)

At the start of each face-to-face class, there will be a short entrance quiz to evaluate your knowledge regarding the lecture videos and chapter readings. These will be administered in class, not online. If students are not present in class, they will not be able to make up the quiz.

In-class activities (12 @ 10 points each; 120 points total):

Each face-to-face class will have activities to be completed in class. Activities will vary in nature from debates, worksheets, and group work. Students must be in class to complete the activities.

3 Exams (3 @ 120 points each; 360 points total)

• Exams are non-cumulative and will be administered covering information based on the lectures, assigned readings, interactive assignments, and videos for each part of the course. Exams may include multiple-choice and short answer. Exams will be timed and open/available for a 24-hour window. You will have 75 minutes to complete the exams. You will be required to install and utilize the Respondus LockDown Browser and Monitor during all exams. EXAMS WILL BE GRADED FOR HALF-CREDIT if an ID is not provided and/or a thorough environment scan is not completed. Further, no one is permitted in the area when you are taking the exam. Covering the camera or leaving the computer will result in a failing grade.

• Course Performance Evaluation Weighting

REQUIREMENTS	PTS			
Post Lecture Questions and Entrance Quiz				
Post lecture questions (12 x 5 pts)	60			
Entrance quizzes (12 x 5 pts)				
In-class activities				
Assignments				
MindTap Activities (10 pts x 12 assignments)	120			
Diet Analysis Project (Part 1 & 2)				
Exams				
Exam 1 (Chapters 1-5)	120			
Exam 2 (Chapters 6-10)	120			
Exam 3 (Chapters 11-14)	120			
TOTAL				

Assessment Rubric

Grading

A = 940-1000	B+ = 880-899.5	C+ = 780-799.5	D = 600-699.5
A- = 900-939.5	B = 840-879.5	C = 740-779.5	F = 0-599.5
	B- = 800-839.5	C - = 700-739.5	

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. See https://cehd.gmu.edu/students/polices-procedures/

Class Schedule

KINE 320 Fall 2022 Schedule *Course work is due at 11:59 pm on date stated						
Week	Topic	Mon	Tues	Wed	Thurs	Fri
1 8/22-8/26	Intro Chap 1	Read syllabus Chapter 1 lecture video	Chapter 1 post- lecture video questions	In-person session Introductions, syllabus review, chapter I		Chapter 1 MindTap assignment
2 8/29-9/2	Chap 2-3	Video Lectures: Ch 2: Nutrition Tools- Standards and Guidelines Ch 3: The Remarkable Body	Chapters 2 and 3 post- lecture video questions	In-person session Chapters 2 and 3		Chapters 2 and 3 MindTap assignments
3 9/5-9/9	Chap 4	Ch 4: The Carbohydrates	Chapter 4 post- lecture video questions	In-person session Chapter 4		Chapter 4 MindTap
4 9/12-9/16	Chap 5	Ch 5: The Lipids	Chapter 5 post- lecture video questions	In-person session Chapter 5		Chapter 5 MindTapassignment
5 9/19-9/23	EXAM 1	Ch 1-5 Exam Review		Exam 1 due		
6 9/26-9/30	Chap 6	Ch 6: The Proteins and Amino Acids	Chapter 6 post- lecture video questions	In-person session Chapter 6		Chapter 6 MindTapassignment
7 10/3-10/7	Chap 7-8	Video Lectures Ch 7: The Vitamins Ch 8: Water and Minerals	Chapters 7 and 8 post-lecture video questions	In-person session Chapter 7 and 8		Chapters 7 and 8 MindTap assignments
9 10/10-10/14	Chap 9	Video Lecture Ch 9: Energy Balance and Healthy Body Weight	Chapter 9 post- lecture video questions	In-person session Chapter 9		Chapter 9 MindTap
10 10/17-10/21	Chap 10	Video Lecture Ch 10: Performance Nutrition	Chapter 10 post- lecture video questions	In-person session Chapter 10		Chapter 10 MindTa assignment

11 10/24-10/28	EXAM 2	Ch 6-10 Exam Review		Exam 2 due	Diet Analysis Part 1
12 10/31-11/4	Chap 11	Video Lecture Ch 11: Diet and Health	Chapter 11 post- lecture video questions	In-person session Chapter 11	Chapter 11 MindTap assignment
13 11/7-11/11	Chap 12	Video Lecture Ch 12: Food Safety and Food Technology	Chapter 12 post- lecture video questions	In-person session Chapter 12	Chapter 12 MindTap assignment
14 11/14-11/18	Chap 13-14	Video Lecture Ch 13 & 14: <i>Life Cycle</i> <i>Nutrition</i>	Chapters 13 and 14 post-lecture video questions	In-person session Chapters 13 and 14	Chapters 13 and 14 MindTap assignments
16 11/21-11/25	Thanksgiving Break				
15 11/28-12/2	EXAM 3	Ch 11-14 Exam Review		Exam 3 due	Diet Analysis Part 2

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: http://cehd.gmu.edu/values/.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see https://catalog.gmu.edu/policies/honor-code-system/)
- Students must follow the university policy for Responsible Use of Computing (see https://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see http://ds.gmu.edu/).
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or https://cehd.gmu.edu/aero/tk20. Questions or concerns regarding use of Blackboard should be directed to https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/.
- For information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:

As a faculty member, I am designated as a "Responsible Employee," and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason's Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason's Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

For additional information on the College of Education and Human Development, please visit our website https://cehd.gmu.edu/students/.