George Mason University College of Education and Human Development

Kinesiology

KINE 420.C01 - Sport and Exercise Nutrition 3 Credits, Summer 2017 Asynchronous, Online

Faculty

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Prerequisites/Corequisites

KINE 320, KINE 310

University Catalog Course Description

Explores the fundamental biochemical and physiological rationale for optimal nutrient intake for health, physical fitness, and athletic performance. Specific attention is focused upon the relationship nutrition has with exercise, physical fitness, health, and athletic performance.

Course Delivery Method

This course will be delivered online using an asynchronous format via the Blackboard learning management system (LMS) housed in the MyMason portal. You will log in to the Blackboard course site using your Mason email name (everything before @masonlive.gmu.edu) and email password.

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 a standard up-to-date browser, either Internet Explorer or Mozilla Firefox is required (note: Opera and Safari are not compatible with Blackboard).
- 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.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
 - Adobe Acrobat Reader: https://get.adobe.com/reader/
 - Windows Media Player: https://windows.microsoft.com/enus/windows/downloads/windows-media-player/
 - Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations

- <u>Course Week</u>: Because asynchronous courses do not have a "fixed" meeting day, our week will start on MONDAY, and finish on FRIDAY.
- <u>Log-in Frequency</u>: Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least THREE times per week.
- <u>Participation</u>: Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- <u>Technical Competence</u>: Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- <u>Technical Issues</u>: 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.
- <u>Workload</u>: 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 weekly 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. You can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
- <u>Netiquette</u>: The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always reread 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.
- <u>Accommodations</u>: Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

Learner Outcomes or Objectives

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

- 1. Recognize the breadth of Nutritional Sciences.
- 2. Define common terms associated with Nutritional Sciences.
- 3. Explain basic nutrient, digestion, and absorption.
- 4. Describe energy systems, fuels, and nutrients supporting physical activity and how nutrition impacts human movement.
- 5. Differentiate and assess what to eat and nutrient timing to enhance human movement.
- 6. Explain the role of nutritional and sport ergogenic aids to enhance human movement.
- 7. Relate basic principles of bodyweight regulation and body composition.
- 8. Evaluate the influence of nutritional manipulations on immune function in physically active individuals.

Professional Standards

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

KSA	Description
	GENERAL POPULATION/CORE: NUTRITION AND WEIGHT
	MANAGEMENT
1.8.3	Knowledge of the relationship between body composition and health.
1.8.4	Knowledge of the effects of diet, exercise, and behavior modification as methods for
	modifying body composition.
1.8.5	Knowledge of the importance of an adequate daily energy intake for healthy
	weight management.
1.8.7	Knowledge of the importance of maintaining normal hydration before, during,
	and after exercise.
1.8.8	Knowledge of the USDA MyPlate and Dietary Guidelines for Americans.
1.8.9	Knowledge of the importance of calcium and iron in women's health.
1.8.10	Knowledge of the myths and consequences associated with inappropriate weight loss
1.6.10	methods (e.g., fad diets, dietary supplements, over-exercising, starvation diets).
	Knowledge of the number of kilocalories equivalent to losing one pound of body fat
1.8.12	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.
1 0 1 4	Knowledge of common nutritional ergogenic aids, the purported mechanism of
1.8.14	action, and any risk and/or benefits (e.g., carbohydrates, protein/amino acids,
	vitamins, minerals, herbal products, creatine, steroids, caffeine).
1.8.15	Knowledge of nutritional factors related to the female athlete triad syndrome
	(i.e., eating disorders, menstrual cycle abnormalities, and osteoporosis). Knowledge of the NIH Consensus statement regarding health risks of obesity,
1.8.16	Nutrition for Physical Fitness Position Paper of the American Dietetic Association,
	and the ACSM Position Stand on proper and improper weight loss programs.
	Ability to describe the health implications of variation in body fat distribution patterns
1.8.17	and the significance of the waist to hip ratio.
1.8.18	Knowledge of the nutrition and exercise effects on blood glucose levels in diabetes.

Required Texts

Nutrition for Sport and Exercise ($3^{\rm rd}$ ed.) by Marie Dunford & J. Andrew Doyle, Cengage Learning

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor on Blackboard.

• Assignments and Examinations

Module Assignments (8 assignments @ 3-10 pts each; 50 points total)

 Assignments may include calculations, filling in spread sheets, and creating informational public blog posts.

Discussion Forum (20 points total)

- **Article Review Post** (**10 pts**) Each student will sign up for <u>one</u> article that they will be responsible for reading and thoroughly summarizing for the class.
- **Forum Responses** (**10 pts**) There are 9 articles, students must read at least one review for each article and kindly respond with additional information, a question, or an interesting point about what was learned. You must also respond to the other student of the topic you review.

2 Exams (2 @ 15 points each; 30 points total)

• Exams are non-cumulative and will be administered covering information based on the lectures, assigned readings, videos, and discussion posts. Exams may include multiple-choice, true-false, matching, and short answer. Exams will be timed and open/available for a 24-hour window.

Course Performance Evaluation Weighting

REQUIREMENTS	PTS		
Assignments			
Sign up for Blog Theme and Article Review			
Create Blog and "About Me"			
Informational Blog Post			
General Calculations	5		
Supplemental Educational Material on Blog	7		
Vitamins and Minerals Worksheet	7		
Sport Nutrition Dietary Recommendation Spreadsheet			
Sample Meal Plan Blog Post	6		
Discussion Forum			
Initial Article Review Post	10		
10 Article Responses (1 pt x 10 articles)	10		
Exams			
Midterm (Chapters 1-6)			
Final Exam (Chapters 7-13)	15		
TOTAL			

Assessment Rubric(s)

Rubrics for each assignment can be found attached to the assignment descriptions within Blackboard.

Grading

•	= 94-100	B+	= 88-89	C+ = 78-79 $D = 60-69$	
A-	= 90-93	В	= 84-87	C = 74-77 $F = 0-59$	
		B-	= 80-83	$C_{-} = 70-73$	

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times.

WEEK	CHAPTERS & TOPIC	MON	TUES	WED	<u>THUR</u>	<u>FRI</u>
		6/26	6/27	6/28	6/29	6/30
1	Intro – Chapter 3	Introduction to Course Lecture Assignment #1: Sign Up for Blog Theme and Article Review	Ch. 1 Intro to Sports Nutrition Lecture	Assignment #2: Create Blog and "About Me"	Ch. 2 Defining and Measuring Energy and Ch. 3 Energy Systems and Exercise Lectures	ISSN Article Reviews: Caffeine and Performance Creatine Supplementation and Exercise
		7/3	7/4	7/5	7/6	7/7
2	Chapters 4 & 5	UNIVERSITY CLOSED Have a SAFE and HEALTHY Holiday!		Ch. 4 Carbohydrates Lecture and Assignment# 3: Informational Blog Post	Ch. 5 <i>Proteins</i> Lecture	Assignment #4: General Calculations & ISSN Article Review: Protein and Exercise
		7/10	7/11	7/12	7/13	7/14
3	Chapters 6 & 7	Ch. 6 <i>Fats</i> Lecture	CHAPTERS 1-6 EXAM REVIEW	MIDTERM EXAM & Extra Credit Opportunity: Evaluate Classmates' Blogs	Ch.7 Water and Electrolyteamerics Lecture	Assignment #5: Supplementation Educational Material on Blog & ISSN Article Review: Exercise and Fluid Replacement
		7/17	7/18	7/19	7/20	7/21
4	Chapters 8-11	Ch. 8 <i>Vitamins</i> & Ch. 9 <i>Minerals</i> Lectures	Assignment #6: Vitamins and Minerals Worksheet	Ch. 10 Diet Planning: Food First, Supplements Second Lecture	Assignment #7: Sport Nutrition Dietary Recommendation Spreadsheet	Ch. 11 Weight & Body Composition Lecture and ISSN Article Review: Meal Frequency Nutrient Timing
		7/24	7/25	7/26	7/27	7/28
5	Chapters 12 &13	Ch.12 Disordered Eating & Exercise Patterns	Ch. 13 Diet & Exercise for Lifelong Fitness & Health Lectures	Assignment #8: Sample Meal Plan Blog Post & ISSN Article Reviews: Beta Alanine Energy Drinks HMB Diets and Body Comp	CHAPTERS 7-13 EXAM REVIEW	FINAL EXAM & Extra Credit Opportunity: Course Evaluation

*Additionally, do not forget to make note of the discussion forum post due date that you signed up for!

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 University Honor Code (see http://oai.gmu.edu/the-mason-honor-code/).
- Students must follow the university policy for Responsible Use of Computing (see http://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://ods.gmu.edu/).

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 http://coursessupport.gmu.edu/.
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing (see http://writingcenter.gmu.edu/).
- The George Mason University Counseling and Psychological Services (CAPS) staff consists of
 professional counseling and clinical psychologists, social workers, and counselors who offer a
 wide range of services (e.g., individual and group counseling, workshops and outreach
 programs) to enhance students' personal experience and academic performance (see
 http://caps.gmu.edu/).
- The George Mason University Office of Student Support staff helps students negotiate life situations by connecting them with appropriate campus and off-campus resources. Students in need of these services may contact the office by phone (703-993-5376). Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to http://studentsupport.gmu.edu/, and the OSS staff will follow up with the student.

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