

GEORGE MASON UNIVERSITY
College of Education and Human Development
School of Recreation, Health, and Tourism
Division of Health and Human Performance

KINE 420: Sport and Exercise Nutrition (3)
Spring 2014

DAY/TIME:	Wed 4:30 pm	LOCATION:	Krug Hall 242
PROFESSOR:	Deanna Busteed	EMAIL ADDRESS:	dbusteed@gmu.edu
OFFICE LOCATION:	Athletic Field House	PHONE NUMBER:	617 835 2351 (cell)
OFFICE HOURS:	By appointment only- Wednesdays or Fridays		

PREREQUISITES: HEAL 330, KINE 310

COURSE DESCRIPTION:

Actively 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.

NATURE OF COURSE DELIVERY:

This course will include lectures, small cooperative learning groups, and large group discussions.

COURSE OBJECTIVES:

This course is designed to enable students to:

- 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 appropriate 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.

REQUIRED TEXTS:

- **Jeukendrup A., & Gleeson, M. (2010). Sport Nutrition: An Introduction to Energy Production and Performance (2nd ed.). Human Kinetics: Champaign, IL.**

COURSE OVERVIEW

The course will be conducted in lecture format and include both small and large group discussions as well as in-class assignments. The course is designed to be an active exploration of the fundamental biochemical and physiological rationale for optimal nutrient intake for exercise, health, physical fitness, and athletic performance.

- **Classroom Demeanor** - Students are expected to attend all class sections, participate in class discussions, complete in-class exercises, and fulfill all assignments. Anyone exhibiting inappropriate behavior may be asked to leave (e.g. sleeping in class, texting). University policy states that all sound emitting devices shall be turned off during class unless otherwise authorized.

- When contacting the instructor(s) in reference to class issues via e-mail or other method (for example a note in my mail box or on my office door), if you do not receive confirmation that I have received your message, project, etc., within a reasonable time period (**2 work days**), then I did not get it! **In other words, if you do not hear back from me, please follow up to make sure we are communicating effectively!**
- Students are always encouraged to schedule time to meet with me on either Wednesdays or Fridays in order to ask additional questions on the material or to just check-in about anything.
- Academic Honesty - Students are held to the standards of the George Mason University Honor Code. Students are expected to honestly represent their work. The possible situations when a student could violate these expectations range from incorrectly citing or failing to cite references/footnotes within papers and projects to cheating on an examination or assignment. Academic integrity is the responsibility a student assumes for honestly representing all academic work. This includes but is not limited to quizzes, examinations, projects, and other forms of oral and written endeavors.
- Student employment does not take priority over academic obligations. I recognize that many students need to work in order to meet living expenses, however, there are distinct guidelines for students in terms of the number of credit hours which should be attempted based on how many hours per week a student has outside employment. For additional information on this subject, please see the GMU student handbook.

EVALUATION:

This course will be graded on a point system, with a total of 475 possible points.

Midterm	100 pts	
Final (cumulative)	100 pts	
Application/Experiential Assignments	100 pts	
Research Project	100 pts	
Presentation	75 pts	
<u>TOTAL</u>	475 pts	(Divide points earned by 475 to calculate grade)

Grading Scale

A = 94-100 (442-475)	B+ = 88 – 89 (416-424)	C+ = 78 – 79 (369-376)	D = 60 – 69 (285-331)
A- = 90 – 93 (425-441)	B = 84 – 87 (397-415)	C = 74 – 77 (350-368)	F = 0 – 59 (0-282)
	B- = 80 – 83 (377-396)	C- = 70 – 73 (332-349)	

TENTATIVE COURSE SCHEDULE

TOPIC		READINGS/ASSIGNMENT DUE
Week 1	Macronutrients & Micronutrients	Chapter1 (Jeukendrup & Gleeson)
Week 2	Nutrients & Recommended Intake	Chapter 2 (J & G) *3 day food log
Week 3	Fuel Sources for Exercise Metabolism	Chapter 3 (J & G)
Week 4	Energy	Chapter 4 (J & G)
Week 4	Nutrient Digestion and Absorption	Chapter 5 (J & G)
Week 5	Carbohydrate	Chapter 6 (J & G)
Week 5	Fat	Chapter 7 (J & G) *fueling plan for athlete
Week 6	Protein and Amino Acids	Chapter 8 (J & G)
Week 6	Water and Fluid Balance	Chapter 9 (J & G)
Week 7	Exam	Chapters 1-9 (J & G)
Week 8	Vitamins and Minerals	Chapter 10 (J & G)
Week 9	Nutrition Supplements/Ergogenic Aids(EA)	Chapter 11 (J & G) *evaluate supplement/EA
Week 10	Nutrition and Training Adaptations	Chapter 12 (J & G)
Week 11	Body Composition, Weight Management	Chapter 13 &14 (J & G)
Week 11	Disordered Eating	Chapter 15 (J & G) * ED Case study
Week 12	Nutrition and Immune Function	Chapter 16 (J & G)
Week 13	Presentations	
Week 14	Presentations	

Note: Faculty reserves the right to alter the schedule as necessary.

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://oai.gmu.edu/honor-code/>].
- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu/>].
- 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 George Mason University 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 must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

Campus Resources

- 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 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/>].
- For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See <http://rht.gmu.edu>].

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

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.

