

pGEORGE MASON UNIVERSITY  
School of Recreation, Health and Tourism  
EFHP 614-0001 Advanced Exercise Nutrition (3)  
Spring 2013

DAY/TIME	T/R 10.30-11.45 a.m.	LOCATION	Bull Run Hall rm 249
PROFESSOR	Dr. Joanne Hunter	EMAIL	dr.joanne_hunter@yahoo.com
OFFICE HOURS	Before/after class		

### **PRE-REQUISITES**

Graduate standing or permission of the instructor.

### **COURSE DESCRIPTION**

Advanced study of nutrition's relation to physical activity, exercise, and sports. Reviews biochemical, physiological, and behavioral aspects of nutrition in promoting health, fitness, and sports performance. Focuses on nutrient needs during life cycle stages.

### **COURSE OBJECTIVES**

At the completion of this course the students should be able to:

1. Define and describe the basic macronutrients and recommendations for an athlete's diet.
2. Determine nutrient needs for specific individuals and apply information to a case study.
3. Define and describe healthful nutrition practices for weight control and fitness/sports.
4. Research and debate current controversial topics in the field of nutrition and fitness.

### **COURSE OVERVIEW**

This course will present nutrition principles regarding macronutrients, vitamin/minerals, and fluids in relation to sports and exercise. It will allow the student to translate theory into practice and to relate content to fitness and sports. Topics will include metabolism, weight management, eating disorders, and guidelines for proper nutrition. The material covered will give the student comprehensive knowledge of nutrition for use in complementary fields. Classes will involve lecture, discussion, and internet modules.

### **NATURE OF COURSE DELIVERY**

Face-to-Face

### **REQUIRED READINGS**

1. Manore, M., Meyer, N., and Thompson, J. (2009). "Sport Nutrition for Health and Performance: 2<sup>nd</sup> edition," Champaign, IL: Human Kinetics.

### **RECOMMENDED RESOURCES**

1. Austin, K., and Seebohar, B. (2011). "Performance Nutrition: applying science of nutrient timing," Champaign, IL: Human Kinetics.
2. Benardot, D. (2012). "Advanced Sports Nutrition: fine tune your food and fluid intake for optimal training and performance, 2<sup>nd</sup> edition," Champaign, IL: Human Kinetics.
3. Clark, N. (2008). "Nancy Clark's Sports Nutrition Guidebook, the edition," Champaign, IL: Human Kinetics.

4. Jeukendrup, A., and Gleeson, M. (2011). "Sport Nutrition: An introduction to energy production and performance. 2nd edition," Champaign, IL: Human Kinetics.
5. National strength and conditioning association. (2011). "NSCA's Guide to sport and exercise nutrition," Champaign, IL: Human Kinetics.
6. [http://www.healthnotes.info/qs\\_db/index.cfm?org=cuyamaca](http://www.healthnotes.info/qs_db/index.cfm?org=cuyamaca)
7. *International Journal of Sport Nutrition and Exercise Metabolism* (Print or on-line version, student rates to subscribe.) <http://www.humankinetics.com/IJSNEM/journalAbout.cfm>
8. Website of interest on coaching tips: <http://www.brianmac.demon.co.uk/>
9. An absolute must see: <http://www.eatright.org/Public/content.aspx?id=7088>
10. Also of interest: [http://www.gssiweb.com/Article\\_List.aspx?topicid=2](http://www.gssiweb.com/Article_List.aspx?topicid=2)
11. And more: <http://www.nlm.nih.gov/medlineplus/sportsfitness.html#cat10>
12. <http://www.free-online-health.com/exercise-mealplans.htm>
13. <http://phpartners.org/nutrition.html>

### **ACADEMIC RESPONSIBILITY**

Although many students must work to meet living expenses, employment must not take priority over academic responsibilities. Students employed more than 20 hours a week are strongly urged not to attempt a full-time academic load. Students employed more than 40 hours a week should attempt no more than 6 credits per semester. Students who fail to observe these guidelines may expect no special consideration for academic problems arising from the pressures of employment. Please see the GMU Academic Catalog for further information.

### **EVALUATION**

**Article Critique:** You are expected to engage with the article rather than just summarize it, by considering its content carefully, and from different angles. Your critique must be objective, so support it with evidence rather than instinct or emotion. As a graduate student, you are expected to read widely and develop analytical skills to assess what you read. When you engage in a critique you are demonstrating to your marker that:

- You have read extensively
- You can identify the particular strengths and weaknesses of those readings
- You can identify different positions and perspectives in the readings
- You are developing the skills and knowledge to engage with the experts
- You are joining in a broader academic debate about an article's merits

Critiquing means that you are developing an understanding of more than a single article: it means that you are developing an understanding of the 'big picture', of the discipline as a whole. Later in your study you may be expected to contribute new understandings to the discipline, so it is important to understand the current state of knowledge.

### **Research TOPIC Assignment (written and oral): (GROUP PROJECTS)**

Investigative topic reports: You and a partner will be assigned to investigate a topic relating to nutrition and a specific sport(s). You may also address general fitness and health as part of your topic discussion. You will give oral presentations and submit a written report, based on your findings, and lead class discussion for your topic. Your topic will include research with at least 5 primary research articles. Other reliable sources may add to the information you present. As part of your topic discussion, incorporate discussions of the primary research articles, including methods of research and findings.

**Personal Meal Design:** Healthy meal planning is important because you can improve the nutritional quality of your diet by eating more meals at home. Healthy meal planning begins with accurate information about good nutrition and tips for applying that information to your daily life. The goal of this assignment is to analyze your food intake for 1 week (including the weekend), determine the nutritional values of the food consumed, calculate caloric intake of the foods ingested, compare results to the Recommended Dietary Allowance for your age and gender, describe ways to improve your dietary profile and generate an ideal meal and nutrition plan that you could use to help in your preparation for competition and to help promote recovery afterwards. This assignment requires that you design 3 unique pre-event meals and 2 unique post event meals. **This assignment will help you prepare for the final paper developing a client nutritional and activity plan.**

**Final Paper: Client nutritional and activity plan:** More detailed instructions are currently on Blackboard, and involve interviewing and counseling the athlete.

**ADDITIONAL REQUIREMENTS**

1. **Participation:** Grades will be based on active, thoughtful participation in class discussions, through online activities, and in-class exercises.
2. **Attendance:** Students are expected to be on time, attend all class meetings, and be prepared for in-class assignments, projects, discussions, and readings.
3. **Labs and observations:** For each class, some exercises, observations, and take-home assignments will be assigned. You will need to download these and turn them in (via email and/or bring to class as directed).

**EVALUATION**

This course will be graded on a point system with a total of 100 possible points.

**Requirements Points**

Article Critique	10%
Research Topic Assignment (written)	15%
Research Topic Assignment (oral)	15%
Personal Meal Design	20%
Final Paper (Client nutritional and activity plan)	40%
<b>Total possible points</b>	<b>100</b>

**GRADING SCALE**

The student's final letter grade will be earned based on the following scale:

<i>Grade</i>	<i>Percentage</i>	<i>Quality Points</i>	<i>Grade</i>	<i>Percentage</i>	<i>Quality Points</i>
A+	94%	4.00	B	83%	3.00
A	93%	4.00	B-	80%	2.67*
A-	90%	3.67	C	73%	2.00
B+	87%	3.33	F	<73%	0.00

Note\*: Although a B- is a satisfactory grade for a course, students must maintain a 3.00 average in their degree program and present a 3.00 GPA on the courses listed on the graduation application.

**TENTATIVE COURSE SCHEDULE (Subject to change)**

<b><i>DATE</i></b>	<b><i>TOPIC: Tuesday</i></b>	<b><i>TOPIC: Thursday</i></b>	<b><i>Assignment Due</i></b>
Week 1: 1/22; 1/24	Course Intro; Chapter 1: Intro to nutrition	Chapter 1 continued	
Week 2: 1/29; 1/31	Chapter 2: Carbohydrates	Chapter 2 continued	
Week 3: 2/5; 2/7	Chapter 3: Fat	Chapter 3 continued	
Week 4: 2/12; 2/14	Chapter 4: Protein	Chapter 4* continued	Article Critique
Week 5: 2/19; 2/21	Chapter 5: Energy & nutrient balance	Chapter 5*: continued	
Week 6: 2/26; 2/28	Chapter 6*: Achieving healthy body weight	Chapter 7*: Body Composition	
Week 7: 3/5; 3/7	Chapter 8: Fluid & electrolyte balance	Chapter 8 continued	
Week 8: 3/12; 3/14	Spring Break – No Class	Spring Break - No Class	
Week 9: 3/19; 3/21	Chapter 9: B vitamins in energy metabolism	Chapter 10: Antioxidant nutrients	Research Topic Assignment (written)
Week 10: 3/26; 3/28	Chapter 11: Minerals & exercise	Chapter 11 continued	
Week 11: 4/2; 4/4	Chapter 12: Micronutrients	Chapter 12*? continued	
Week 12: 4/9; 4/11	Chapter 13: Nutrients for bone health	Chapter 13 continued	Personal Meal Design
Week 13: 4/16; 4/18	Chapter 14: Nutrition & fitness assessment	Chapter 14 continued	
Week 14: 4/23; 4/25	Chapter 15*: Nutrition & the active female	Chapter 15* continued	
Week 15: 4/30; 5/2	Chapter 16*?: Ergogenic substances	Chapter 16*? continued	Final Paper
Week 16: May 14 10:30am – 1:15pm Research Topic Assignment (oral)			

*Note: Faculty reserves the right to alter the schedule as necessary.  
All assignments are due by 5pm on the Thursday of the week.*

**STUDENT EXPECTATIONS**

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- 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/1301gen.html>].
- 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.
- Students are expected to exhibit professional behaviors and dispositions at all times.

### **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/>].

**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.

