

**HPER 3970**  
**Body Composition/Weight Control**  
**Fall 2009**

<b>INSTRUCTOR:</b>	Dr. Ayers	<b>EMAIL:</b>	s.ayers@wmich.edu
<b>OFFICE:</b>	1046 SRC	<b>PHONE:</b>	269-387-2712
<b>OFFICE HOURS:</b>	T, R: 9:30-10:30a & by appointment	<b>FAX:</b>	269-387-2704
<b>COURSE LOCATION:</b>	1035 SRC		
<b>COURSE WEB SITE:</b>	<a href="http://homepages.wmich.edu/~sayers">http://homepages.wmich.edu/~sayers</a>		

**COURSE DESCRIPTION:** The purpose of this course is to educate the undergraduate Exercise Science student in various aspects of nutrition, sports nutrition, body composition, and weight management techniques. The course will cover the topics of macro- and micro-nutrients, the assessment and interpretation of dietary intake, the application of nutrition to sport specific performance, the assessment and interpretation of body composition, and the principles of weight management. Laboratory exercises will support the theoretical knowledge provided in the classroom.

**COURSE TEXT:**

Jeukendrup, A. and Gleeson, M. (2004). *Sport Nutrition: An Introduction to Energy Production and Performance*. Human Kinetics, Inc.: Champaign, IL.

**COURSE OBJECTIVES:**

Each student will identify on a written test or demonstrate in a practical experience understanding of:

- the general principles of nutrition
- macro- and micro-nutrients
- the application of nutritional concepts to sport
- the assessment and interpretation of body composition data
- weight management principles
- nutrition supplements
- various laboratory techniques dealing with nutrition and body composition

**ATTENDANCE:** Students are expected to attend and participate fully in all course-related sessions to earn available points. In case of an absence, assigned class work will be accepted only if prior arrangements are made with the instructor. Individual circumstances will be given consideration only if the instructor is contacted before the day of the absence. Call or email. Attending all course-related meetings (ON TIME) and participating fully will add an additional 2% onto the final course grade.

**Class begins promptly at 3:00pm EST (check classroom time).**

**ACADEMIC INTEGRITY/DISHONESTY:**

Academic honesty is central to WMU's educational mission. It enables each of us to fulfill our potential, learn effectively with and from one another, acquire specialized knowledge and skills, become informed, responsible and creative thinkers and have pride in our institution's standing. To these ends I require that students in this class represent their own work accurately and truthfully without cheating, fabrication, falsification or forgery, multiple submission, plagiarism, complicity and computer misuse, according to the policies in WMU's Student Code that pertain to Academic Integrity (<http://catalog.wmich.edu>). If there is reason to believe you have been involved in academic dishonesty you will be referred to the Office of Student Conduct. You will be given an opportunity to review the charge(s). If you believe you are not responsible you will have the opportunity for a hearing.

This particular class includes group/partner assignments and lab experiences. Although you may discuss these with others in this class, **the final answers that you turn in for grading must be written independently by you, and reflect your own efforts, knowledge, understanding and expression of ideas.** Use of others' work constitutes academic dishonesty. In addition, offering or providing your work to others is also a form of academic dishonesty (complicity). If you have questions or are confused about what is or is not appropriate regarding this, or other issues of academic integrity, please consult with me during office hours or after class. I am available at those times to discuss anything pertaining to this course. The WMU Writing Center can give you additional help with paraphrasing and citing sources correctly. If you observe other students in this class engaging in any form of academic dishonesty I invite you to approach me in confidence about it.

Please see the following links to access the Code of Honor and general academic policies on issues including but not limited to diversity, religious observance and student disabilities:

<http://osc.wmich.edu>

<http://osc.wmich.edu>

<http://www.wmich.edu/registrar>

**ACADEMIC REQUIREMENTS :**

Students must be present in class to submit assignments. NO LATE WORK WILL BE ACCEPTED. Unless otherwise stated, all assignments are due on the indicated date at the beginning of class. If students are dissatisfied with a grade, any discussion of that grade must occur within one week of receipt to be reconsidered. NO grades will be changed after that one week 'grace period.'

Laboratory Assignments: Various hands-on laboratory exercises and demonstrations will be performed. Small laboratory write-ups will be assigned for each experience.

Laboratory #1: Resting Metabolic Rate and Substrate Utilization During Exercise

Laboratory #2: Fluid Balance and Replacement

Three-Day Dietary Record: Each student will record his/her diet for three days and then complete a dietary analysis. This analysis will be used to construct a written report of the results.

Research Article Critique: Each student will provide a 1-2 page summary of a research article examining the influence of an ergogenic aid/supplement on sport performance. A paper copy of the original article being summarized is required for full credit on this assignment.

<u>GRADE COMPONENT</u>	<u>% OF GRADE</u>	<u>GRADING SCALE</u>
Assignments	30	92 -100% = A
Quizzes	30	89 - 91% = BA
Mid-term exam	20	80 - 88% = B
Final exam	20	77- 79% = CB
		70- 76% = C
		67- 69% = DC
		60- 66% = D
		<60% = E

HPER 3970 Tentative Block Schedule

Date	Tuesday	Date	Thursday
9/8	-Course Orientation -Syllabus/Expectations -Discuss Dietary/PA Assessment	9/10	-General Principles of Nutrition <b>Assigned Reading:</b> Ch. 1
9/15	-General Principles II -Review Dietary/PA Assessment Asgmt. <b>Assigned Reading:</b> Ch. 1 <b>DUE:</b> Dietary & PA Assessment	9/17	-Energy <b>Assigned Reading:</b> Ch. 3
9/22	-Energy II <b>Assigned Reading:</b> Ch. 3	9/24	-Lab #1
9/29	<i>Quiz 1: Chap. 1, 3</i> -Carbohydrates <b>Assigned Reading:</b> Ch. 5 <b>DUE:</b> Lab #1 paper	10/1	-Carbohydrates II <b>Assigned Reading:</b> Ch. 5
<b>10/6</b>	-Carbohydrates III Dr. Cheatham <b>Assigned Reading:</b> Ch. 5	<b>10/8</b>	-Fat Dr. Cheatham <b>Assigned Reading:</b> Ch. 6
10/13	-Protein <b>Assigned Reading:</b> Ch. 7	10/15	<i>Quiz 2: Chap. 5, 6</i> -Dietary Assessment sharing <b>DUE:</b> 3-day Dietary Assessment
10/20	-Midterm review <b>DUE:</b> Midterm study guide	10/22	<b>MIDTERM</b> <b>CH 1, 3, 5, 6, 7</b>
10/27	-Water Requirements & Fluid Balance <b>Assigned Reading:</b> Ch. 8	10/29	-Water Requirements & Fluid Balance II <b>Assigned Reading:</b> Ch. 8
11/3	-Lab #2	11/5	-Micro-nutrients: Vitamins & Minerals <b>Assigned Reading:</b> Ch. 9 <b>DUE:</b> Lab #2 paper
11/10	-Micro-nutrients: Vitamins & Minerals II <b>Assigned Reading:</b> Ch. 9	11/12	-Article sharing <b>DUE:</b> 1-2 pg article summary
11/17	<i>Quiz 3: Chap. 8, 9</i> -Nutrition Supplements <b>Assigned Reading:</b> Ch. 10	11/19	-Weight Management <b>Assigned Reading:</b> Ch. 11
11/24	-Weight Management II <b>Assigned Reading:</b> Ch. 11	<b>11/26</b>	<b>THANKSGIVING</b>
12/1	-Eating Disorders in Athletes <b>Assigned Reading:</b> Ch. 12	12/3	-Eating Disorders in Athletes <b>Assigned Reading:</b> Ch. 12
12/8	<i>Quiz 4: Chap. 11, 12</i> Guest lecture: Sport-specific nutrition needs (WMU Athletic Department)	12/10	Course evaluation
<b>12/15</b>	<b>12:30 – 2:30 p.m. FINAL EXAM</b>		