NUIP 5320-090: Nutrition for Exercise and Sport

Class Time:	***It is highly recommended that you set aside a specific time of day to review class material as you would any on-campus course***
Location:	Online
Instructor:	Stacie Wing-Gaia, PhD, RD, CSSD, CD Mailbox: HPER North 214 Office: HPER West 108-F (in the Nutrition Clinic) Phone: 801-585-9623 E-mail: Stacie.Wing@health.utah.edu
Teaching Assistant:	TBA
Office Hours:	Instructor: Mondays 1:00 - 3:00 pm HPER West 108-F (in the Nutrition Clinic) Teaching Assistant: TBA

Course Prerequisites: Successful completion of this course requires that you have taken a basic nutrition course and an exercise science course. NUTR 1020 or 4440 and either ESS 3094 or 4300/4310 are STRONGLY recommended.

Course Description: This course explores the metabolism of nutrients and nutritional needs for optimal human performance; specific recommendations for training and competition, and basic dietary guidelines. In-depth discussions on current research findings concerning energy metabolism, fluid and electrolyte balance, vitamin-mineral supplementation, use of ergogenic aids, and exercise in extreme environments will also be discussed.

Course Objectives: Upon successful completion of the course the student will be able to :

- Identify specific nutrient needs of individuals who engage in physical activity/sport.
- Describe human energy metabolism and substrate utilization (i.e., carbohydrate, fat, protein metabolism) at rest and during exercise.
- Provide carbohydrate, protein and fat intake recommendations for before, during and after exercise.
- Describe the changes that occur in micronutrient metabolism as a result of exercise and explain how these changes may impact the nutrient needs of physically active individuals.
- Identify fluid needs for exercise and provide fluid intake recommendations to maintain optimal hydration.

- Describe the components of the female athlete triad; identify risk factors,physiological complications, prevention and treatment strategies.
- Interpret/analyze scientific research pertaining to sports nutrition.
- Evaluate sports nutrition information, nutritional supplements, and ergogenic aids and distinguish between scientifically sound information and nutritional quackery.

Required Readings:

Dunford M and J. Andrew Doyle. Nutrition for Sport and Exercise, 3rd edition. Thomson/Wadsworth, 2014.

Additional readings are on Canvas under the corresponding module.

Performance Evaluation:

Exams (3) @100 points each = 300 points
Assignments (3) @ 50 points each = 150 points
Discussions (4) @ 20 points each = 80 points
Total Points Possible: 530

Grading

A: 93-100% C:73-77%
A-:90-92% C-:70-72%
B+:88-89% D+:68-69%
B:83-87% D:63-67%
B-:80-82% D-:60-62%
C+:78-79% E:< 60%

Assignments:

The assignments in this class are designed to provide the student's with practical experience, i.e., the opportunity to "apply" the information learned in class. Instructions for each assignment are posted under "assignments" in the left hand column of the course. Due dates can be found in the calendar function. All students are encouraged to email (only submit final assignments via the assignment tool) rough drafts to their instructor at least 7 days prior to the due date for feedback. Your instructor will then send your assignment back with comments. You can view your graded assignments and feedback by clicking on the assignment tool and reading TA/instructor comments and/or downloading your graded assignment. Please read the comments FIRST and then email your instructor with any further questions you may have regarding grading.

Discussions:

To take advantage of the online format, there will be four discussions posted throughout the second half of the semester. These discussions are designed to expand on lecture topics and encourage critical thinking. All discussions close at **11:59 pm Mountain Standard Time (Utah)** on the due dates listed in the calendar function. Each discussion is worth 20 points. ***General discussion criteria are as follows:***

1. Comments are well-defined and relevant to the topic.
2. Communication is well-structured and organized.
3. Communication is honest, civil, and respectful.
4. Contributions are clear and concise (~2-4 paragraphs and no more than 3/4-1typed page)
5. Points are accurate, logical, and appropriate.

6. Multiple peer-reviewed scientific references are used to document the points you make, particularly when discussing controversial issues.
7. A new question or comment is posed that relates to the discussion topic.
8. Comments and inquiries of other class members are provided with responses.
9. Critical thinking skills (assessment, synthesis, analysis, evaluation, problem solving) are demonstrated where appropriate.
10. Skill at working cooperatively within a group is demonstrated.

Specific Discussion Grading Criteria: 20 Potential Points per Discussion
Discussion Point Standards

- 1-5 point: Contribute 1 time during the discussion period with input that addresses some, but not all, of the initial discussion posting. Substantive postings with scientific references earn the most points.
- 6-10 points: Contribute 1 time during the period with input that addresses the majority of the initial discussion posting.Substantive postings with scientific references earn the most points.
- 10- 15 points: Contribute a **minimum** of 2 times on **different** days during the discussion period with input that addresses the primary discussion topic and includes a follow up response. Substantive postings with peer-reviewed scientific references earn the most points.
- 15-20 points: Contribute a minimum of 2 times on different days during the discussion period with input that addresses the majority of the primary discussion topic and includes a follow up response which enhances the flow of the discussion, poses new questions, and demonstrates evidence of synthesis, analysis, interpretations, and/or problem-solving. Substantive postings earn the most points.
- **NOTE: responses made on the same day count as one post. Both initial and follow-up responses need to include citations for credit.**

Exams:

- All exams are administered through Uonline by registering through Smart Proctoring. You can register for exams by clicking on the "schedule exam" link in the left hand menu of the course. Please read the tutorial on how to register for exams.
- You must register for a location and time for each exam prior to taking the exam. Please note, locations and times fill up early. To sign up for your preferred choice, please register EARLY.
- All exams are 50 multiple choice questions worth 2 points each. Test questions come from the study guides. Therefore, it is strongly recommended that students complete study guides using BOTH the textbook and lecture slides.
- Please note the lecture slides merely highlight points in the textbook. They are NOT designed to "stand alone" meaning you must read the textbook to understand the concepts. You are encouraged to email your study guides to your instructor or teaching assistant to review and obtain feedback.

- Deadlines are at **11:59 pm Mountain Standard Time.** If you are out of area please note the time zone difference and plan accordingly.

Make-up Assignment/Exam Policy

Assignments are due by ***by 11:59 pm*** on the due dates as noted on the assignment instructions and calendar. Late projects are not accepted unless you have a legitimate medical or emergency excuse (see exam policy below). *It is highly recommended that you turn in assignments early in the event you encounter problems using Canvas.* Computer problems are **NOT** an excuse for a late assignment. All late assignments are subject to the late exam/assignment policy listed below.

- **Assignments must be submitted with .pdf, .doc, .docx, or .txt file extensions.** Submit only final versions of assignments. Corrupt files or files that cannot be opened will be considered late and subject to the late exam/assignment policy listed below. *Assignments are due on **Sunday, 11:59 pm, Mountain Standard Time (Utah).** Please make note of this if traveling out of state when an assignment is due.*

- **Make sure that you can view your assignment in the assignment submission box to ensure it was submitted.** You should also receive a confirmation that it was submitted successfully. If you can not see the assignment, your instructor and TA cannot either so resubmit and/or email your assignment to your TA and instructor. "Failed" submissions will be subject to the late assignment policy listed below.

- There are no make-up exams unless prior arrangements have been made with the instructor. Requests for missing an exam and taking a make-up exam should be given to the instructor no later than **ONE-WEEK prior** to the scheduled exam time. **Verifiable documentation is required explaining why you need a special arrangement exam.**

- If you miss an exam or assignment without prior permission you will be allowed to take a make-up exam or turn in your assignment only if you have a legitimate medical or emergency excuse and provide **verifiable, official documentation** (physician's note, accident report, death certificate, etc). **The instructor must be notified within 24 hours of the missed exam (or assignment).** Missed exams (and assignments) without prior permission or a written excuse or notification **within 24 hours** will be assigned a grade of "zero". Students who have notified their instructor within the noted time frame and have verifiable documentation **have ONE opportunity for a make-up exam or assignment which must be completed within 3 days of the due date. Missed make-up exams or assignments will be assigned a grade of "zero.",**

- There is **no extra credit or "curve"**in this class.

- Students are expected to adhere to The Code of Student Rights and Responsibilities. The code is provided in detail on the University of Utah webpage (www.admin.utah.edu/ppmanual/8/8-10.html). The code specifies student rights as well as conduct involving cheating, plagiarism, collusion, fraud, theft, etc. **Cheating is not tolerated in this class and will result in an automatic "E" for the course and department and University notification of academic misconduct. This may result in removal from the student's program of study and/or the University of Utah.**

University Policies:

• Please refer to the academic calendar found at http://registrar.utah.edu/academic-calendars/index.php for adding, dropping, and withdrawing deadlines.

• Students are expected to adhere to The Code of Student Rights and Responsibilities. The code is provided in detail on the University of Utah webpage (www.admin.utah.edu/ppmanual/8/8-10.html).The code specifies student rights as well as conduct involving cheating, plagiarism, collusion, fraud, theft, etc.

• STATEMENT OF EQUAL ACCESS:

o The University of Utah and the Division of Nutrition seek to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be give to the Center for Disability Services (CDS), 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

• SEXUAL MISCONDUCT

o Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

• STUDENT WELLNESS

o Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness; www.wellness.utah.edu; 801-581-7776.

Student Responsibilities

This class is administered solely online. Often, students enroll in online classes for the convenience of "going to class" at any time. Please be aware that **online classes frequently take MORE time than a traditional class** offered on campus.

Specifically, for success in this course, students are expected to:

- "attend" class frequently by logging in daily to check for announcements and emails
- read all course content
- turn assignments in on time
- contact instructor or teaching assistant with questions
- email instructor rough drafts of assignments and study guides for feedback (optional but recommended)

- communicate in a professional and respectful manner

Instructor and Teaching Assistant Responsibilities

As the instructor, I strive to make this class informative and applicable to students. Specifically, both the instructor and teaching assistant will:

- respond to emails within 24 hours
- grade all assignments within one week
- provide feedback on assignments, exams, and feedback
- return rough drafts of assignments and study guides within one week of receiving them
- communicate in a professional and respectful manner

The following topics will be covered in this course. Please see Modules for the weekly lectures and readings.

Topic	**Chapter Readings***
Introduction to Sports Nutrition	1
Energy Balance and Nutrition Assessment	2
Energy Systems & Exercise	3
Carbohydrates	4, 10
Proteins	5, 10
Fats	6, 10
Water and Electrolytes	7,10
Vitamins	8
Minerals	9
Weight and Body Composition	11
Diet and Exercise for Lifelong Fitness & Health	12
Disordered Eating and the Female Athlete Triad	13
Ergogenic aids: Dietary Supplements & Anabolic Steroids	pp.16-17, 253, 281,299 ch. 10

***** Additional readings are on Canvas under the corresponding lecture.

Course Summary

Date	Details
Mon Aug 21, 2017	classes begin
	Lecture 1: intro to sports nutrition
Sun Aug 27, 2017	Getting Started Quiz due by 11:59pm
Mon Aug 28, 2017	Lecture 2: energy balance
Fri Sep 1, 2017	Last day to drop classes
Mon Sep 4, 2017	Labor Day: No Class
Tue Sep 5, 2017	Lecture 3: energy systems
Sun Sep 10, 2017	Assignment 1: Assessment case study due by 11:59pm
Mon Sep 11, 2017	lecture 4: carbohydrate
Mon Sep 18, 2017	Exam I opens
Sat Sep 23, 2017	NUTR 5320 Exam 1 due by 11:59pm
Sun Sep 24, 2017	Assignment 2: Carbohydrate Case Study due by 11:59pm
Mon Sep 25, 2017	Lecture 5: protein
Mon Oct 2, 2017	Lecture 6: Lipids
Sun Oct 8, 2017	Assignment 3: Protein Case Study due by 11:59pm
Mon Oct 9, 2017	Fall Break: no class this week
Mon Oct 16, 2017	Lecture 7: Fluid & Electrolytes
Fri Oct 20, 2017	last day to withdraw
Sun Oct 22, 2017	Discussion 01: Fat Loading due by 11:59pm

Date	Details
Mon Oct 23, 2017	Lecture 8: vitamins
Mon Oct 30, 2017	Exam II opens
Sat Nov 4, 2017	NUTR 5320 Exam 2 due by 11:59pm
Sun Nov 5, 2017	Discussion 02: Antioxidants due by 11:59pm
Mon Nov 6, 2017	Lecture 9: Minerals
Mon Nov 13, 2017	Lecture 10: weight & body composition
Sun Nov 19, 2017	Discussion 03: Iron due by 11:59pm
Mon Nov 20, 2017	Lecture 11: Lifelong Health
Mon Nov 27, 2017	lecture 12: disordered eating
Sun Dec 3, 2017	Discussion 04: Transitioning Athlete due by 11:59pm
Mon Dec 4, 2017	Lecture 13: Ergogenic Aids
Mon Dec 11, 2017	exam 3 opens
Fri Dec 15, 2017	NUTR 5320 Exam 3 due by 11:59 pm