

11:709:440/ 01:377:456 Nutrition and Fitness (3 credit hours)

Instructor Information

Tracy G. Anthony, Ph.D.
Department of Nutritional Sciences
SEBS - Rutgers University New Brunswick
166 Foran Hall
tracy.anthony@rutgers.edu
848-932-6331
Office hours: by appointment

Sara C. Campbell, PhD, FACSM
Department of Kinesiology and Health
SAS - Rutgers University New Brunswick
061 Loree Gym
saracamp@kines.rutgers.edu
848-932-7036
Office hours: by appointment

Course Prerequisites

11:709:255 Nutrition and Health; 01:119:115/116 General Biology

Course Description

This course provides an understanding of the interactions between nutrition and exercise by integrating metabolism and physiology concepts in the context of recreational physical fitness training. This course will cover fluid, macronutrient and micronutrient requirements for sport and explore specific roles that carbohydrates, fats, proteins, vitamins and minerals play in fueling the body before, during and after exercise. Special topics exploring specific nutritional concerns of various types of athletes will be discussed. Additionally, students will conduct an individual research journey to assess the scientific basis and legitimacy of a dietary supplement claim.

Required Text

Marie Dunford, J. Andrew Doyle; *Nutrition for Sport and Exercise* (Third Edition). Wadsworth, Cengage Learning (2015).

Learning goals

Through lectures, readings, class discussions and completion of an independent research project, students will:

1. Gain an understanding of basic nutrition principles and apply this knowledge to the needs of recreational athletes to enhance lifelong fitness and prevent chronic disease.
2. Outline the basic issues related to the legality of dietary supplements and the decision on whether to include them in a diet and training plan.
3. Classify types of research studies and levels of evidence in the exploration of dietary supplement claims and the use of scientific studies as a marketing tool.
4. Identify and describe disordered eating and exercise patterns.
5. Gain an understanding of the training and experience necessary to obtain various nutrition and exercise credentials.

Learning outcomes will be assessed by the following:

Exam 1 – 100 points
Exam 2 – 100 points
Exam 3 – 100 points
Exam 4 – 100 points
Individual Research Journey - 100 points
COURSE TOTAL – 500 points

- Exams include multiple-choice, fill-in, true-false, and short essay questions.
- Individual research journey guidelines will be detailed in class and provided in Resources on Sakai.

Course Outline

Date	Tentative Topic	Reading
9/5 Tuesday	Course Overview and Introduction	Ch 1
9/8 Friday	Basic Standards and Guidelines for Athletes	Ch 1
9/12 Tuesday	Understanding and Evaluating Dietary Supplements based on Scientific Evidence Research Journey Part 1 Draft Due	Ch 1
9/15 Friday	Defining & Measuring Energy	Ch 2
9/19 Tuesday	Energy Systems and Exercise I	Ch 3
9/22 Friday	Energy Systems and Exercise II	Ch 3
9/26 Tuesday	EXAM 1	
9/29 Friday	Carbohydrates I Research Journey Part 2 Draft Due	Ch 4
10/3 Tuesday	Carbohydrates II	Ch 4
10/6 Friday	Proteins I	Ch 5
10/10 Tuesday	Proteins II	Ch 5
10/13 Friday	Fats I	Ch 6
10/17 Tuesday	Fats II	Ch 6
10/20 Friday	EXAM 2	
10/24 Tuesday	Water and Electrolytes I Research Journey Part 3 Draft Due	Ch 7
10/27 Friday	Water and Electrolytes II	Ch 7
10/31 Tuesday	Vitamins	Ch 8
11/3 Friday	Minerals	Ch 9
11/7 Tuesday	Diet Planning: Food	Ch 10
11/10 Friday	Diet Planning: Supplements	Ch 10
11/14 Tuesday	EXAM 3	

11/17 Friday	Weight and Body Composition I	Ch 11
11/21 Tuesday	Weight and Body Composition II	Ch 11
11/28 Tuesday	Disordered Eating Patterns Research Journey Part 4 Draft Due	Ch 12
12/1 Friday	Disordered Exercise Patterns	Ch 12
12/5 Tuesday	Lifelong Fitness and Health	Ch 13
12/8 Friday	Diet, Exercise and Chronic Disease	Ch 13
12/12 Tuesday	Special Topics/Wrap-Up Research Journey All Parts 1-6 Due	
12/22 Friday	EXAM 4 – NOT comprehensive	8-11 AM

Grading Scale:

A	500 – 448 (100-90 %)
B+	447 – 428 (89-86 %)
B	427 – 400 (85-80 %)
C+	399 – 378 (79-76 %)
C	377 – 350 (75-70 %)
D+	349 – 328 (69-66 %)
D	327 – 300 (65-60 %)
F	299 and below (<60 %)

Course Policies

Attendance is expected and participation is encouraged. If you expect to miss one or two classes, please use the University absence reporting website <https://sims.rutgers.edu/ssra/> to indicate the date and reason for your absence (An email will automatically be sent to your professor). In cases where you must miss classes for periods longer than one week, please contact a Dean of Students for assistance to help verify your circumstances.

Laptop computers are to be used only for lecture slides or note taking. Cell phones should be in the “off” mode, use of cell phones in class is prohibited.

Make-up Exams:

Make-up exams will be granted only under exceptional circumstances, such as **serious** illness or death in the immediate family. **It is the student’s responsibility to contact the instructors in person, by telephone or by e-mail, prior to or within 24 hours of the missed exam.** In the case of a missed exam that is appropriately documented (see below), the student must be prepared to **take the make-up within 1 week** following the missed exam. You must contact the instructor to arrange a date and time for a make-up exam. Appropriate documentation or independent verification of circumstance (e.g., doctor’s note for illness) is required for approval to take a make-up exam. Failure to provide appropriate documentation will result in a grade of 0 (zero) points on the missed exam.

Academic Integrity

Please read the university's Academic Integrity Policy.

<http://academicintegrity.rutgers.edu/integrity.shtml>

Any violation of academic integrity will NOT be tolerated and students will be put up for suspension, expulsion or failure due to severity. **Plagiarism will not be tolerated.** All writing must be *your own*; credit will NOT be given for text copied from other sources. Papers may be scanned with Turnitin and evidence of duplicating content from other sources will be handled according to the policies in place at Rutgers.

American with Disability Act Compliance:

In accordance with the ADA, reasonable accommodations will be made for students with documented special needs. Students who require special assistance or accommodations must follow the procedures outlined at <https://ods.rutgers.edu/students/registration-form>. Full disability policies and procedures are available at <https://ods.rutgers.edu>.

Student-Wellness Services:

Just In Case Web App

<http://codu.co/cee05e> - Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ www.rhscaps.rutgers.edu

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation:

<https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at:

<https://ods.rutgers.edu/students/registration-form>.

Scarlet Listeners

(732) 247-5555 / <http://www.scarletlisteners.com/>

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.