

## **11:709:475 and 01:377:475 Nutrition and Fitness (3 credit hours)**

### **Instructor Information**

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### **Course Prerequisites**

11:709:255 Nutrition and Health; 01:119:115/116 General Biology OR 01:377:370 Exercise Physiology

### **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 the 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 engage in an individual research journey to explore the scientific basis and legitimacy of a dietary supplement claim.

### **Required Text**

Marie Dunford, J. Andrew Doyle; *Nutrition for Sport and Exercise* (Fourth Edition). Wadsworth, Cengage Learning (2019)

### **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 in Resources on Canvas.

### Course Outline

Date	Tentative Topic	Reading	Instructor
9/1 Wed	What is Sports Nutrition?	Ch 1	Anthony/Campbell
9/6 Mon	Labor Day – No Class		
9/8 Wed	Understanding and Evaluating Scientific Evidence	Ch 1	Anthony
9/13 Mon	Media Gimmicks and Influence on Sports Nutrition	Ch 1	Campbell
9/15 Wed	Defining & Measuring Energy Research Journey Part 1 Draft Due	Ch 2	Campbell
9/20 Mon	Energy Systems and Exercise I	Ch 3	Campbell
9/22 Wed	Energy Systems and Exercise II	Ch 3	Campbell
9/27 Mon	EXAM 1 – material 9/1 – 9/22	Foran 138A 3:00 – 4:20 pm	
9/29 Wed	Carbohydrates I Research Journey Part 2 Draft Due	Ch 4	Campbell
10/4 Mon	Carbohydrates II	Ch 4	Campbell
10/6 Wed	Proteins I	Ch 5	Anthony
10/11 Mon	Proteins II	Ch 5	Anthony
10/13 Wed	Fats I	Ch 6	Anthony
10/18 Mon	Fats II  Research Journey Part 3 Draft Due	Ch 6	Anthony
10/20 Wed	EXAM 2 – material 9/29 – 10/18	Foran 138A 3:00 – 4:20 pm	
10/25 Mon	Water and Electrolytes I	Ch 7	Anthony
10/27 Wed	Water and Electrolytes II	Ch 7	Anthony
11/1 Mon	Vitamins	Ch 8	Anthony
11/3 Wed	Minerals	Ch 9	Anthony
11/8 Mon	Diet Planning: Food	Ch 10	Anthony

11/10 Wed	Diet Planning: Supplements	Ch 10	Anthony
11/15 Mon	EXAM 3 – material 10/25 – 11/10	Foran 138A 3:00 - 4:20 pm	
11/17 Wed	Weight and Body Composition I  Research Journey Part 4 Draft Due	Ch 11	Campbell
11/22 Mon	Weight and Body Composition II	Ch 11	Campbell
11/29 Mon	Disordered Eating Patterns	Ch 12	Campbell
12/1 Wed	Disordered Exercise Patterns	Ch 12	Campbell
12/6 Mon	Lifelong Fitness and Health	Ch 13	Campbell
12/8 Wed	Diet, Exercise and Chronic Disease	Ch 13	Campbell
12/13 Mon	Diet Planning Case Studies  FINAL VERSION – Research Journey DUE	Handed out and completed in class.	Anthony/Campbell
12/22 Wed	EXAM 4 – material 11/17 - 12/13	Foran 138A 4:00 – 7:00 pm	

### 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 instructor 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 **write 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 is required prior to approval to take a make-up exam; failure to provide appropriate documentation will result in a grade of F (0 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.

### **Department Diversity Statement**

The Department of Kinesiology and Health supports an inclusive learning environment wherein diversity and authenticity are valued. We are committed to creating a culture of equality that respects the diverse voices of our students, faculty, and staff. We will continuously strive to create a curriculum and academic environment to reflect the community we serve, and drive innovation, social responsibility, and excellence. Our diversity in thought, skill, and academic discipline is a resource and strength, which stands to benefit the whole and positively contribute to university and global reach.

### **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/](http://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/](http://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.