

FNUT 3761 - Science of Nutrition in Exercise

Fall 2026 Syllabus, Section 01, CRN 41117,

Credit hours: 3

Instructor

Katheryn Willey

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Public Instructor Information

Instructor Title:

Adjunct Faculty, Nutrition

Instructor Professional Qualifications:

Katheryn Willey, MS, RD, LD, CDCES

Registered Dietitian (RD)

Licensed Dietitian (LD)

Certified Diabetes Care and Education Specialist (CDCES)

Bachelor of Science in Nutrition, Kent State University, 2015

Master of Science in Food and Nutrition, Indiana University of Pennsylvania, 2017

Doctoral Student, EdD in Leadership – Health & Wellness, American College of Education, in progress.

Instructor Office Location:

Online / By Appointment

Instructor Office Phone:

Not Applicable – Please contact the instructor through YSU email.

Course Description

3761. Science of Nutrition in Exercise. Advanced study of concepts related to the integration of nutrition and physical activity in athletic as well as normal and diseased populations. Emphasis on substrate utilization and modification, and nutrient/ergogenic supplementation and crash diets.

Prereq.: FNUT 1551, FNUT 3735. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Nutrition for Sport and Exercise. 6e	Dunford, M., & Doyle, J. A.	9798214449562

Required Text:

Dunford, M., & Doyle, J. A. *Nutrition for Sport and Exercise. 6e. Cengage.*

Cengage MindTap

Students are responsible for completing the assigned chapter readings associated with each weekly module.

Additional evidence-based readings may be assigned throughout the semester and will be provided through the course learning management system.

Additional Course Materials

Students will need:

- Reliable internet access
- Access to the YSU learning management system
- Access to the required course textbook and associated course materials
- Word-processing software capable of submitting Microsoft Word-compatible documents
- Ability to access assigned peer-reviewed articles and supplemental readings

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Chapter 1	Introduction to Sports Nutrition	Ch. 1 Pre-Quiz; Ch. 1 Assignment; Discussion Board; Ch. 1 Post-Quiz – Due Sunday 11:59 p.m.
8/31	Chapter 2	Defining and Measuring Energy	Ch. 2 Pre-Quiz; Ch. 2 Assignment; Discussion Board; Ch. 2 Post-Quiz – Due Sunday at 11:59 p.m.
9/7	Chapter 3	Energy Systems and Exercise	Ch. 3 Pre-Quiz; Ch. 3 Assignment; Discussion Board; Ch. 3 Post-Quiz – Due Sunday at 11:59 p.m.
9/14	Chapter 4	Carbohydrates	Ch. 4 Pre-Quiz; Ch. 4 Assignment; Discussion Board; Ch. 4 Post-Quiz; Exam 1 – Due Sunday at 11:59 p.m.
9/21	Chapter 5	Proteins	Ch. 5 Pre-Quiz; Ch. 5 Assignment; Discussion Board; Ch. 5 Post-Quiz – Due Sunday at 11:59 p.m.
9/28	Chapter 6	Fats	Ch. 6 Pre-Quiz; Ch. 6 Assignment; Discussion Board; Ch. 6 Post-Quiz – Due Sunday at 11:59 p.m.
10/5	Chapter 7	Water and Electrolytes	Ch. 7 Pre-Quiz; Ch. 7 Assignment; Discussion Board; Ch. 7 Post-Quiz – Due Sunday at 11:59 p.m.
10/12	Chapter 8	Vitamins	Ch. 8 Pre-Quiz; Ch. 8 Assignment; Discussion Board; Ch. 8 Post-Quiz; Exam 2 – Due Sunday at 11:59 p.m.
10/19	Chapter 9	Minerals	Ch. 9 Pre-Quiz; Ch. 9 Assignment; Discussion Board; Ch. 9 Post-Quiz – Due Sunday at 11:59 p.m.
10/26	Chapter 10	Diet Planning: Food First, Supplements Second	Ch. 10 Pre-Quiz; Ch. 10 Assignment; Discussion Board; Ch. 10 Post-Quiz – Due Sunday at 11:59 p.m.
11/2	Chapter 11	Ergogenic Aids and Supplements	Ch. 11 Pre-Quiz; Ch. 11 Assignment; Discussion Board; Ch. 11 Post-Quiz – Due Sunday at 11:59 p.m.
11/9	Chapter 12	Weight and Body Composition	Ch. 12 Pre-Quiz; Ch. 12 Assignment; Discussion Board; Ch. 12 Post-Quiz; Exam 3 – Due Sunday at 11:59 p.m.
11/16	Chapter 13	Disordered Eating and Exercise Patterns in Athletes	Ch. 13 Pre-Quiz; Ch. 13 Assignment; Discussion Board; Ch. 13 Post-Quiz; Case Study – Due Sunday at 11:59 p.m.
11/23	Thanksgiving Academic Break	Thanksgiving Academic Break	No new coursework
11/30	Chapter 14	Diet and Exercise for Lifelong Fitness and Health	Ch. 14 Pre-Quiz; Ch. 14 Assignment; Discussion Board; Ch. 14 Post-Quiz; Final Exam – Due Sunday at 11:59 p.m.
12/7	YSU Final Examination Week		No additional FNUT 3761 coursework

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.