

KSS 3710 - Physiology of Exercise

Fall 2026 Syllabus, Section 01, CRN 40806,

Credit hours: 4

Instructor

Matthew O'Dell

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Public Instructor Information

Instructor Title: Assistant Professor

Instructor Professional Qualifications: MBA, YSU; MS, University of Pittsburgh; BA Exercise Science, YSU; ACSM-CEP

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Course Description

3710. Physiology of Exercise. Acute responses and chronic adaptations of the body to physiological demands of physical activity. Topics related to the optimization of performance in sport and exercise include neuromuscular and cardiorespiratory function, energy production and utilization, and environmental influences. Prereq.: Exercise Science major. 4 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Exercise Physiology for Health, Fitness, and Performance 6th edition		

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		Macro, Micro, Molecular Skeletal Muscle	Quiz 1
8/31		Contraction and Fiber Types + Force, Fatigue, Function	Quiz 2
9/7		Neuromuscular Control	Quiz 3
9/14		Muscular Training Principles	Exam 1
9/21		Substrate Metabolism + Energy Regulation	Quiz 4
9/28		Anaerobic Metabolism	Quiz 5
10/5		Aerobic Metabolism	Quiz 6
10/12		Metabolic Training Principles	Quiz 7+8
10/19		Body Comp	Exam 2
10/26		The Cardiovascular System + Dynamics	Quiz 9
11/2		Cardio Response to Exercise	Quiz 10
11/9		Respiration	Quiz 11
11/16		Respiratory Exercise Response	Quiz 12
11/23		Training + Adaptations	Exam 3
11/30		Exercise Immunology	Take home exam due (Exam 4)
12/7		Final (Exam 5)	

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.