KSS 3710L - Physiology of Exercise Laboratory

Fall 2026 Syllabus, Section 02, CRN 40808,

Credit hours: 1

Instructor

Keegan Butler

Email: kpbutler@ysu.edu

Public Instructor Information

Instructor Title: Keegan Butler
Instructor Professional Qualifications:

Ph. D candidate, H.S. with a concentration in Sport Science, Youngstown State University
Master's, Strength and Conditioning, University of Wisconsin – River Falls
Bachelor's, Exercise Science, Youngstown State University

Instructor Office Location:*Beeghly Center 307*
Instructor Office Phone: 330-941-2558

Course Description

3710L. Physiology of Exercise Laboratory. Experiments and basic laboratory procedures in the field of exercise physiology. Concurrent with KSS 3710. 1 s.h.

Course Readings

Group	Title	Author	ISBN
	Required Laboratory Manual for Exercise Physiology 2nd or 3rd edition	G Gregory Haff, Charles Dumke	1492536946

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

Day	Date	Reading(s)	Proposed Topic	Due/To Prepare for Class
Fri	9/4	Please refer to module 1	Neuromuscular Lab 1: Maximal Strength Testing (1RM, 3RM, 5RM, 10RM, VBT Estimate)	Prelab quiz and post lab assignment
Fri	9/11	Please refer to module 2	Neuromuscular Lab 2: Force Plate Testing (CMJ, CMJ Rebound, IMTP, Altitude Landing)	Prelab quiz and post lab assignment
Fri	9/18	Please refer to module 3	Neuromuscular Lab 3: Velocity Based Training via TENDO (Average and Peak Velocity of Barbell Movements)	Prelab quiz and post lab assignment
Fri	10/9	Please refer to module 4	Acceleration and Speed Lab, Introduction to Anaerobic (10,20,40,60)	Prelab quiz and post lab assignment
Fri	10/16	Please refer to module 5	Anaerobic Conditioning Lab 1: The Wingate	Prelab quiz and post lab assignment
Fri	10/23	Please refer to module 6	Introduction to cardiometabolic testing: Resting Metabolic Rate	Prelab quiz and post lab assignment
Fri	11/6	Please refer to module 7	ECG Lab	Prelab quiz and post lab assignment

Fri	11/13	Please refer to module 8	Cardiopulmonary Testing Lab 1: Submaximal VO2 (Treadmill, Bike, Steps)	Prelab quiz and post lab assignment
Fri	11/20	Please refer to module 9	Maximal VO2 (Treadmill), OBLA	Prelab quiz and post lab assignment

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.