Kinesiology I – Course Syllabus

Coach Young – Lake Dallas High School

2025-2026 School Year

Dear Parents and Guardians,

Welcome to Lake Dallas High School! This syllabus outlines the course plan for your child's class this semester, including key topics, expectations, and how you can support their success. As required by Texas law (Senate Bill 12), this document serves as the instructional plan and is available for your review. I look forward to working with you and your child!

Contact Information

• Teacher: Coach Young

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• **Phone**: 940-497-1430

• Conference Time: 1:25pm - 2:10pm

Best Way to Reach Me: Email

Course Overview

Kinesiology I is all about understanding **how the human body moves** — from the way muscles and joints work, to how the brain and nerves control movement, to how sports and exercise affect us physically and mentally. You'll explore anatomy, biomechanics, injury prevention, and career paths in health and sports science.

Course Goals

By the end of this course, you will:

- Understand the basics of human anatomy, movement, and biomechanics.
- Learn how to analyze and improve movement in sports and daily life.
- Develop communication, teamwork, and leadership skills.
- Explore careers in kinesiology and health sciences.
- Practice professional and ethical behavior in health-related fields.

Major Units of Study

Unit 1: Professional Skills in Health Science

- Communicating clearly (verbal, written, and medical terms)
- Teamwork and leadership skills
- Workplace habits: punctuality, organization, and time management

Unit 2: Careers in Kinesiology

- Career options in sports, therapy, and health science
- Education needed: certifications, college degrees, and licenses
- How society's needs are increasing job opportunities in kinesiology

Unit 3: Growth, Development, and Physical Literacy

- What kinesiology is and why it matters
- How humans grow and develop physically from childhood to adulthood
- Designing activities for people of different ages and abilities

Unit 4: Skeletal System & Joints

- Types of joints and how they move
- Factors affecting flexibility and stability
- Anatomical positions, planes, and axes of motion

Unit 5: Muscular System & Movement

- Muscle types and properties (fast vs. slow twitch)
- Muscle roles: agonist, antagonist, synergist
- Types of contractions (concentric, eccentric, static)
- How muscles and nerves work together to create movement

Unit 6: Upper Body Anatomy

- Shoulder, elbow, forearm, wrist, and hand structures and movements
- Muscles involved and their functions
- Common sports injuries

Unit 7: Lower Body Anatomy

- Hip, pelvis, thigh, knee, ankle, and foot structures and movements
- Muscle groups and functions
- Common sports injuries

Unit 8: Spine & Thorax

- Spinal column and ribcage structure
- Movements and muscle groups involved
- Common back and chest injuries

Unit 9: Biomechanics Basics

- Mechanics vs. biomechanics
- Motion types: linear and rotary
- Measuring movement (speed, velocity, acceleration)
- Relationship between motion and sports performance

Unit 10: Posture & Stability

- How muscles and nerves maintain posture
- Effects of genetics and lifestyle on posture
- Stability, balance, and energy use in standing positions

Unit 11: Human Motion & Motor Skills

- Types of motion and what causes them
- Stages of learning a new skill
- Types of feedback for improvement
- Designing effective practice sessions

Assessments & Projects

- Quizzes & Tests On anatomy, vocabulary, and biomechanics concepts
- Movement Labs Hands-on analysis of body mechanics
- Career Exploration Project Research and present a kinesiology career
- Skill Analysis Project Break down a sport or activity into movement phases

• Final Exam – Cumulative test on course content