



**KENOSHA UNIFIED SCHOOL DISTRICT NO. 1  
CURRICULUM AND INSTRUCTIONAL SERVICES**

**COURSE SYLLABUS FOR HUMAN ANATOMY &  
PHYSIOLOGY (423211 & 423212)**

**Number of Credits:** 1 Cr. **Locations:** Indian Trail Academy

**Prerequisites:** Successful completion of Biology and Chemistry

**Course Description**

This class highlights the systems that make up the human body: circulatory, respiratory, digestive, reproductive, muscular, skeletal, and nervous. The interdependence of the systems and the breakdown of these systems is studied. A substantial amount of laboratory experience will be involved either through actual lab work or computerized simulations.

**Course Standards**

Standard A: Science Connections

Standard B: Nature of Science

Standard C: Science Inquiry

Standard F: Life and Environmental Science

Standard G: Science Applications

Standard H: Science in Social and Personal Perspectives

*Most Essential Benchmarks can be viewed at [www.kusd.edu](http://www.kusd.edu)*

**Lifelong Learning Standards**

- Knowledgeable person
- Effective communicator
- Quality producer
- Complex thinker
- Self-directed learner
- Contributing citizen

*Lifelong learning benchmarks may be viewed at: [www.kusd.edu](http://www.kusd.edu).*

**Course Outline**

1. Introduction to Human Body Plan
  - a. Overview of organ systems
  - b. Directional and regional terms
  - c. Cavities and planes
  - d. Homeostasis and negative feedback
2. Cells and Tissues
  - a. Review of animal cell
  - b. Four tissue types and corresponding structure, function and location
  - c. Tissue shape and layering
  - d. Disease: What is cancer?
3. Integument System
  - a. Functions
  - b. Growth and repair

- c. Pigment
- d. Layers and accessory structures
- e. Diseases: Acne and Psoriasis
- 4. Skeletal System
  - a. Function
  - b. Naming bones
  - c. Axial and appendicular
  - d. Bone cell types
  - e. Growth and repair
  - f. Joint types and movement
  - g. Disease Osteoporosis and Rickets
- 5. Muscular System\
  - a. Functions
  - b. Naming muscles
  - c. Origin, insertion and action
  - d. Structure (gross and microscopic)
  - e. Disease: MD
  - f. Sliding filament theory
  - g. Fiber types
- 6. Cardiovascular System
  - a. Function
  - b. Structures (chambers, valves, vessels)
  - c. Blood flow path
  - d. Blood components, function and typing
  - e. Conduction (EKG)
  - f. Disease
  - g. CPR
- 7. Lymphatic/Immune System
  - a. Functions
  - b. Structures (vessels, nodes, cells)
  - c. Lines of defense
  - d. Immune cell types
  - e. Disease: AIDS
- 8. Digestion and Nutrition
  - a. Functions
  - b. Name parts of GI Tract and accessory organs
  - c. Nutrition and diet
  - d. Body composition and BMI
  - e. Disease: Eating Disorders
- 9. Excretory System
  - a. Function
  - b. Kidney, ureter, bladder, urethra
  - c. Disease: Kidney stones
- 10. Respiratory System
  - a. Functions
  - b. Name part of respiratory tract

- c. Mechanics of breathing
  - d. Gas exchange
  - e. Disease: Emphysema
11. Nervous System
- a. Functions
  - b. Neuron and impulse conduction
  - c. CNS and PNS
  - d. Sensory organs
  - e. Brain anatomy and hemispheres
  - f. Drug interactions
  - g. Disease and injury
12. Endocrine System
- a. Functions
  - b. Naming organs/glands/cells and their hormones
  - c. Hormone types and target cells
  - d. Homeostasis and feedback loops
  - e. Chemical messengers
  - f. Disease: Growth disorders
13. Reproductive System
- a. Functions
  - b. Male and female anatomy
  - c. Menstrual cycle
  - d. Meiosis/gamete production
  - e. Pregnancy and fetal development
  - f. Disease: How STDs cause infertility

**Board-Approved Instructional Materials**

Longenbaker, Susannah N. (2008). *Mader's Understanding Human Anatomy & Physiology (6<sup>th</sup> Ed.)*. McGraw-Hill Higher Education.

**Methods of Assessment**

Final exams should be cumulative in nature, emphasizing the most essential benchmarks for the course. Results of the final exam represent 20 percent of the final grade, but this single measure **may not** drop a student's grade by more than one letter grade. In courses that rely heavily on a major project, performance exhibition, etc., the project should be divided into stages or components and each of those should be graded separately, providing students with frequent and specific feedback.

**Board-Approved Grading Scale**

Excerpts taken from School Board Rule 6452

GRADING SCALE

A+=98-100 percent	B+=86-89 percent	C+=76-79 percent	D+=66-69 percent
A=93-97 percent	B=83-85 percent	C=73-75 percent	D=63-65 percent
A-=90-92 percent	B-=80-82 percent	C-=70-72 percent	D-=60-62 percent
			F=0-59 percent

MAKE-UP WORK

Students submitting work up to ten school days late without prior approval may receive up to two grades lower on the work than they would have received if the work had been submitted on time (i.e., B+ lowered to a D+). Student work submitted after ten school days without prior approval shall not be accepted for credit and shall be recorded with a score of zero.

Upon returning to school after an absence, a student has the responsibility within the number of days equal to the length of the absence or suspension to meet with the teacher to develop a plan for making up missed work, quizzes, and examinations. A truant student has the responsibility on the first day he or she returns to the course/class to meet with the teacher to develop a plan for making up missed work, quizzes, and examinations. Lower grades may not be given for late work due to excused absences, suspension, or truancy unless the work is submitted later than agreed upon deadlines.

**See Rule 6452 in its entirety at: [www.kusd.edu](http://www.kusd.edu).**