



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

**COURSE SYLLABUS FOR HUMAN BIOLOGY
(422011 & 422012)**

Number of Credits: 1 **Locations:** Bradford, Hillcrest, LakeView Tech, Reuther,
Tremper

Prerequisites: Successful completion of Biology or Biology Honors

Course Description

This course focuses on human biology: the cell, reproduction development, and the body as the basis for the transfer of biological information from one generation to the next. The impact of genetics on our society will be studied. Note: This course is not open to students who have successfully completed Human Anatomy & Physiology.

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

Explanations of standards and most essential benchmarks may be viewed at: 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.

Course Outline

- I. Human Body Plan
 - a. Overview of organ systems
 - b. Directional and regional terms
 - c. Cavities and planes
- II. Cells and Tissues
 - a. Review of animal cell
 - b. Four tissue types and corresponding structure, function and location
 - c. Tissue shape and layering
- III. Skeletal System
 - a. Structure & Function
 - b. Naming bones
 - c. Axial and appendicular
 - d. Bone cell types

- e. Growth and repair
 - f. Joint types and movement
 - g. Disease Ex: Osteoporosis, Rickets
- IV. Muscular System
- a. Functions
 - b. Naming muscles
 - c. Origin, insertion and action
 - d. Structure (gross and microscopic)
 - e. Disease
 - f. Sliding filament theory
 - g. Fiber types
- V. Integumentary System
- a. Structure & Functions
 - b. Growth and repair
 - c. Pigment
 - d. Layers and accessory structures
 - e. Disease
- VI. 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
- VII. Lymphatic System
- a. Functions
 - b. Structures (vessels, nodes, cells)
 - c. Lines of defense
 - d. Immune cell types
 - e. Disease/AIDS
- VIII. Digestive system and Nutrition
- a. Structure & Functions
 - b. Mechanical and chemical digestion
 - c. Absorption and elimination
 - d. Name parts of GI Tract and accessory organs
 - e. Nutrition and diet
 - f. Disease
- IX. Urinary System
- a. Structure & Function
 - b. Kidney, ureter, bladder, urethra
 - c. Disease
- X. Respiratory System
- a. Structure & Functions
 - b. Name part of respiratory tract
 - c. Mechanics of breathing

- d. Gas exchange
- e. Disease
- XI. Nervous System
 - a. Structure & Functions
 - b. Neuron and impulse conduction
 - c. CNS vs PNS
 - d. Sensory organs
 - e. Brain anatomy and hemispheres
 - f. Drug interactions *
 - g. Disease and injury
- XII. Endocrine System
 - a. Structure & 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
- I. Reproductive System
 - a. Structure & Functions
 - b. Male and female anatomy
 - c. Menstrual cycle
 - d. Meiosis/gamete production
 - e. Pregnancy and fetal dev. *
 - f. Disease

Board-Approved Instructional Materials

Postlethwait, John H. and Janet L. Hopson (2009). *Modern Biology*. Holt, Reinhart, and Winston.

Resources for Parents:

www.go.hrw.com

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

A=93-97 percent

A-=90-92 percent

B+=86-89 percent

B=83-85 percent

B-=80-82 percent

C+=76-79 percent

C=73-75 percent

C-=70-72 percent

D+=66-69 percent

D=63-65 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.