

**MRS. SITTON
ANATOMY & PHYSIOLOGY
2009-10 COURSE SYLLABUS**

Course Description: Anatomy & Physiology is the study of the structure and function of the human body beginning with the physical basis of life and proceeding through various levels of increasing complexity. Emphasis is placed on homeostasis and homeostatic regulating mechanisms, the interaction between humans and their environment, and metabolic processes that occur in our bodies.

Instructional Philosophy: Students will be given accurate and current information concerning the structure and function of the human body. This course is especially designed for students who are pursuing careers in allied health fields, but it is of value for any student interested in becoming more aware of the physical basis of life and the complexity of the human body. Classroom activities will include reading, researching, projects, and problem solving. Students will often work in groups, but will be expected to complete individual assignments in relation to the group work. Students will be expected to present any major projects to the class.

Major Course Goals: The student will demonstrate an understanding of the following concepts:

1. The student will demonstrate an understanding of anatomical terminology related to organization of the human body.
2. The student will demonstrate an understanding of anatomy and physiology as closely related branches of science and characteristics of life are traits that humans share with all living organisms.
3. The student will demonstrate an understanding of the mechanics of particle exchange within the human body.
4. The student will recognize the cell as the fundamental structure and functional unit of the body.
5. The student will demonstrate an understanding of tissues and their function within organs and organ systems.
6. The student will demonstrate an understanding of the major organs and describe their role in each of the systems.
7. The student will demonstrate and understanding of the function and relationship of the skeletal system.
8. The student will demonstrate an understanding of how the body's systems work to control physiological activities.
9. The student will complete all concepts developed by the literacy and numeracy committees for the present year.

Major Course Objectives/Benchmarks by Quarter: Mastery of the course objectives is required with a minimum 70%.

First Quarter

1. Overview of Human Organization
 - a. Cell Structure and Function
 - b. Body Tissues and Membranes
2. Support, Movement & Protection
 - a. The Integumentary System
 - b. Skeletal System

Second Quarter

1. Continue with Support, Movement & Protection
 - a. Muscular System
2. Integration & Coordination
 - a. Nervous System
 - b. Sensory System
 - c. Endocrine System

Third Quarter

1. Maintenance of Body
 - a. Blood
 - b. Cardiovascular System
 - c. Lymphatic System
 - d. Respiratory System
 - e. Digestive System

Fourth Quarter

1. Maintenance of Body Continued
 - a. Urinary System
 - b. Excretion System
2. Reproduction & Development
3. Dissection Project

Required/Recommended Reading:

1. Students will be required to read their textbook.
2. Students will be required to read their laboratory assignments and be prepared before class.
3. Students will be required to have appropriate reading material to read during all SSR times.
4. Students will read articles from scientific journals, case studies and magazines during the school year.
5. Students will participate in the literacy program by reading 300 pages of science related material.

Major course projects and Instructional Activities: Students will participate in, but are not limited to the following projects and activities:

Project #1: Reading Assignments

Students will be given various articles based on current health related issues and complete an assessment sheet given by the instructor. Various materials may be used for the article in review: magazines, newspapers, internet, or television. Each review should include the title and publication date, a summary and personal opinion of the article(s).

Project #2: Owl Pellets

Each group of students will be given an owl pellet to dissect. Many of the skeletal bones of mammals, which the owls feed upon, are similar to that of humans. Each group will be responsible for reconstructing a skeleton, identifying bones and describing its function.

Project #3: Eye Dissection

Since the coordination of the human body involves the interactions of various senses the students will dissect a cow / sheep eye. Students will orally reflect on what they have learned about the structure and function of the eye and how it relates to the human body as a whole.

Project #4: Chicken Wing Dissection

Students will work in pairs to dissect a chicken wing and compare the structure / function of the muscles and tendons to that of a human arm.

Project #5: Fetal Pig Dissection Booklet / Presentation

After completing units on various organ systems students will be given a fetal pig to dissect. During dissection, the students will answer questions, take digital pictures, and compare the placement of organs in the pig to that of the human body. Each group of students will create a dissection booklet using their digital pictures and the correct terminology to identify each organ and its function. The booklet must state the steps each group took in dissecting their specimen and the location of each organ.

Course Assessment Plan: Students will be assessed in the following manner:

1. All students will be required to keep a portfolio of their work in a 1 inch 3-ringed binder to be assessed at the end of each quarter.
2. There will be a test and/or project at the completion of each unit of study. Test will consist of open ended constructive response questions, performance events, and objective questions.
3. Students will be required to complete homework as part of their grade.
4. A comprehensive quarter final will be given at the end of each quarter.
5. An End of Course Exam will be given at the end of the 4th quarter that will cumulative.
6. 80% all Classroom Work / Projects / Unit Tests
20% all Final Exams / End of Course Exam

Classroom Expectations:

1. Be on time and in your seat when the bell rings.
2. Be prepared at the beginning of class. Have your textbook, loose-leaf notebook paper, binder, homework, and a pen or pencil. On SSR days, you must have your reading material.
3. Be respectful of all people and property in the room.
4. Read and follow all directions, as given, the first time.
5. No gum, food, or drink in the room at any time.
6. No grooming (fixing hair, make-up, etc.)
7. Keep your feet on the floor and not on the chairs.
8. Keep book bags out of the aisles and purses/hip bags on the floor during class.
9. The teacher, NOT THE BELL, dismisses the class.

All discipline problems will be handled as described in the student handbook. Be sure you know the consequences for your actions in this classroom.

Supplies and Materials Needed: Students should have the following materials for class:

1. Loose-leaf notebook paper
2. 1 inch, 3-ringed binder
3. Pen or pencil (NO RED PENS!!!)
4. Post-it notes
5. Scientific calculator

Homework Policy and Grading Scale: Please refer to the Student Handbook for the Homework Policy. The grading scale is as follows:

A	100-95	C	76-73
A-.....	94-90	C-.....	72-70
B+.....	89-87	D+.....	69-67
B	86-83	D	66-63
B-.....	82-80	D-.....	62-60
C+.....	79-77	F.....	59-0

Absences: The student is responsible for missed assignments in accordance with the CHS Student Handbook. An assignment notebook and homework crate will be used for assignments given each day. You can always check new.schoolnotes.com for assignments. When you return from an absence:

1. Check the assignment notebook for any assignments given the day you were absent. Worksheets are placed in a folder that corresponds with the day they were given out (M-F). Check the homework crate for any worksheets given on that day. NOTE: There maybe more than one worksheet in a folder. Assignments are kept in the folders for one week, then placed in a folder marked Assignments at the back of the crate until the end of the quarter.
2. Labs missed during an excused absence may be made up during PASS days within a reasonable time frame of that absence. If a lab cannot be set up, an alternative assignment will be given.

Extra Help: If you need any extra assistance I will be available before and after school.

Time and Place to be Reached by Parent: If you need to contact me for any reason please feel free to call me before school, after school, or during my plan period 2nd hour (8:39-9:29 a.m.) the phone number at the high school is 431-2616 ext 4150. I can also be reached by email at gsitton@centralr3.org. Homework assignments can be found online at new.schoolnotes.com