

The year 2023-2024

Human Anatomy & Physiology/Health Care Essentials

Instructor: Kristine Spivey

Contact Info: kristine.spivey@peachschools.org

Meets: 1st Block

Course Description

This course covers both the anatomy and physiology of each of the human body's organ systems. This course assumes that students have completed a high school biology course and possibly a chemistry course, as well. Please note that the reproductive system will be covered in detail, including accurate yet respectful illustrations and descriptions.

- Intro to Anatomy & Physiology
- Histology
- Integumentary & Skeletal Systems
- Skeletal System
- Muscular System
- Nervous System
- Endocrine System
- Cardiovascular System
- Lymphatic System
- Digestive System
- Respiratory System
- Urinary System
- Reproductive Systems

Textbook

The textbook that will be used for this course is *Essentials of Human Anatomy & Physiology* (Marieb).

Materials Needed

2-inch, 3-ring binder
Set of 13 dividers
College Ruled Paper

Pens/Pencils
Colored Pencils
School Issued Chromebook
Headphones for the Chromebook

NGSS Standards

HS-LS1-1. Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins that carry out the essential functions of life through systems of specialized cells.

HS-LS1-2. Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

HS-LS1-3. Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.

HS-LS1-6. Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids, and/or other large carbon-based molecules.

HS-LS1-7. Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy.

HS-LS2-3. Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions.

General Expectations:

- Students will prepare for class discussions, labs, and activities by reading the assigned text prior to class.
- Students may have additional homework to practice the topics learned in class or to extend their thinking. These will often be collected and/or checked the following day.
- Some dissections are included in this curriculum. Students are expected to at least be able to watch the dissection, even if they don't feel comfortable using the tools.

Missed Work:

- Students missing class are not exempt from homework/classwork (check Google Classroom) for that day. They should provide this homework and the scheduled homework upon returning to class. If this is not possible, arrangements should be made with the teacher for a make-up schedule.
- Labs or class activities that are missed due to an absence can be made up or exempted depending on circumstances. The student must clarify with the teacher to determine whether the assignment should be completed or exempted.
- Multiple absences will have a detrimental effect on a student's classwork grades.

Grading

45% Tests

- Regular chapter tests
- Projects
- Midterm Exam
- Final Exam

35% Homework

- Textbook questions and/or worksheets
- Labs and Other Classwork
- In-class procedures
- Discussion Questions/Lab Report

20% Cumulative Final Exam

A final exam exemption incentive program has been developed to promote good attendance, positive behavior, and exemplary academic achievement in high schools. During semester final exam days, Peach County High School students will be offered the opportunity to exempt their final exams. To be eligible to participate in the Incentive Program, you must meet the following criteria:

A student with a grade of 90 or higher in a class at the end of the semester, five (5) or fewer unexcused absences, AND, no more than (3) documented behavior

referrals (minor) for the semester"

Late Work Policy

All work is due at the beginning of class on the due date. Assignments turned in after that time will receive a maximum of 80% credit. There is also a cut-off for late assignments. After this date, no late work will be accepted for that unit. Once we have completed the unit exam, that unit is closed and cannot be made up/corrected.

Student name

Syllabus, Laboratory Safety, and Dissection Agreement

I understand that this is a laboratory class. At certain times during this class, I will be asked to follow directions regarding my dress and behavior that will allow me to be better protected against heat, chemicals, or sharp objects. Examples include using eye protection, tying back long hair, and wearing closed-toed shoes. If I choose to ignore the directions that are given, I assume all risk to myself.

I also understand that horseplay, pranks, or other acts of immaturity are especially dangerous and are prohibited. I understand that I may be removed from the lab if, in the opinion of the teacher, I am a threat to myself and/or my classmates. I also understand that, on occasion, expensive equipment is used in the lab. If I break this equipment because I am not following directions carefully, I will be responsible for replacing it.

I will never eat or drink in the classroom unless permitted by the teacher. I understand that all chemicals are potentially harmful to some degree and I will observe careful hygiene including washing my hands after every lab.

I understand that this class heavily emphasizes dissection, and I can, at the very least, watch the dissection as it is performed by another group member. I will treat all biological specimens with respect.

_____ Student signature, Date

_____ Parent signature, Date