**Anatomy and Physiology SYLLABUS 2022-23**

Application

Description automatically generated with low confidence

**I. Teacher Information**

Teachers Name: Andrea Stephens Google class codes: 1A=r72s47h

2A=mdc6u25

3A=wiayzsf

Tutorial Days: Course Website:

Thursday-3:45-4:45 http://www.astephensscience.com

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Teachers E-mail:

[amstephens@atlantak12.org](file:///C:\Users\amstephens\Desktop\amstephens@atlantak12.org%09)  School Website:

[astephensscience@gmail.com](mailto:astephensscience@gmail.com)

<http://www.atlanta.k12.ga.us/Domain/3508>

School Phone #: 404-802-5200

Teacher personal cell #: 404-797-8555

**II. Course Description and Objectives**

Course Description:

The human anatomy and physiology curriculum is designed to continue student investigations that began in grades K-8 and high school biology. This curriculum is extensively performance and laboratory based. It integrates the study of the structures and functions of the human body, however rather than focusing on distinct anatomical and physiological systems (respiratory, nervous, etc.) instruction should focus on the essential requirements for life. Areas of study include organization of the body; protection, support and movement; providing internal coordination and regulation; processing and transporting; and reproduction, growth and development. Chemistry should be integrated throughout anatomy and not necessarily taught as a stand-alone unit. Whenever possible, careers related to medicine, research, health-care and modern medical technology should be emphasized throughout the curriculum. Case studies concerning diseases, disorders and ailments (i.e. real-life applications) should be emphasized. (GA Dept. of Education)

Course Objectives:

**SAP1. Students will analyze anatomical structures in relationship to their physiological functions.**

a. Apply correct terminology when explaining the orientation of body parts and regions.

b. Investigate the interdependence of the various body systems to each other and to the body as a whole.

c. Explain the role of homeostasis and its mechanisms as these relate to the body as a whole and predict the consequences of the failure to maintain homeostasis.

d. Relate cellular metabolism and transport to homeostasis and cellular reproduction.

e. Describe how structure and function are related in terms of cell and tissue types.

**SAP2. Students will analyze the interdependence of the integumentary, skeletal, and muscular systems as these relate to the protection, support and movement of the human body.**

a. Relate the structure of the integumentary system to its functional role in protecting the body and maintaining homeostasis.

b. Explain how the skeletal structures provide support and protection for tissues, and function together with the muscular system to make movements possible.

**SAP3. Students will assess the integration and coordination of body functions and their dependence on the endocrine and nervous systems to regulate physiological activities.**

a. Interpret interactions among hormones, senses, and nerves which make possible the coordination of functions of the body.

b. Investigate the physiology of electrochemical impulses and neural integration and trace the pathway of an impulse, relating biochemical changes involved in the conduction of the impulse.

c. Describe how the body perceives internal and external stimuli and responds to maintain a stable internal environment, as it relates to biofeedback.

**SAP4. Students will analyze the physical, chemical, and biological properties of process systems as these relate to transportation, absorption and excretion, including the cardiovascular, respiratory, digestive, excretory and immune systems.**

a. Describe the chemical and physical mechanisms of digestion, elimination, transportation, and absorption within the body to change food and derive energy.

b. Analyze, and explain the relationships between the respiratory and cardiovascular systems as they obtain oxygen needed for the oxidation of nutrients and removal of carbon dioxide.

c. Relate the role of the urinary system to regulation of body wastes (i.e. water electrolyte balance, volume of body fluids).

d. Examine various conditions that change normal body functions (e.g. tissue rejection, allergies, injury, diseases and disorders) and how the body responds.

e. Describe the effects of aging on body systems.

**SAP5. Students will analyze the role of the reproductive system as it pertains to the growth and development of humans**.

a. Explain how the functions of the reproductive organs are regulated by hormonal interactions.

b. Describe the stages of human embryology and gestation including investigation of gestational and congenital disorders (e.g. ectopic pregnancy, miscarriage, cleft palate, hydrocephaly, fetal alcohol syndrome).

c. Describe the stages of development from birth to adulthood (i.e. neonatal period, infancy, childhood, adolescence and puberty, and maturity).

**III. Materials and Supplies**

Pencils, 2 packs of loose leaf notebook paper, 3 ring binder, notecards, one pack of copy paper

**IV. Course Outline/Curriculum Overview**

The following academic concepts will be covered. THIS IS ONLY A GUIDE AND IS SUBJECT TO CHANGE.

**V. Primary Text(s)**

Marieb, Elaine; Essentials of Human Anatomy and Physiology,

Boston: Pearson; 9th edition; 2007.

**VI. Grading Policy:**

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| --- | --- | --- |
| **Infinite Campus Categories** | **Weight** | **Sample Assignments** |
| Formative Pre-Assessment | 0% | Pre-Test/Diagnostic Test |
| Assessment During Learning | **25%** | Performance-based Assessments/Quizzes/Mid-unit |
| Group/Independent Practice (In Class) | **40%** | Classwork/Projects/Labs/Group work/Read 180/ Math 180/APEX |
| Homework | **5%** | Additional Practice (Khan Academy, Desmos, USA Test Prep, Geogebra, etc.) |
| Summative Assessment | **30%** | MYP Assessments/Culminating Projects/Unit Tests/Final Exam |

**Grading Scale A:  90-100 B:  80-89 C:  70-79 F:   0-69**

***Grading Systems-Grading Expectations [See Board Policy IHA-R (1)]***

[*https://go.boarddocs.com/ga/aps/Board.nsf/goto?open&id=9DGK564F8144#*](https://go.boarddocs.com/ga/aps/Board.nsf/goto?open&id=9DGK564F8144)

**VII. Assessment Calendar**

Unit/Benchmark Assessments

A minimum of 2 graded assignments per week.

To include:

\*Daily Knowledge checks-**Classwork grade**

\*Weekly Vocabulary Quiz every Friday-**Formative assessment**

\*Case studies and Virtual lab Activities-**Formative assessment**

\*Summative assessments- Dates subject to shift.

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| --- | --- | --- | --- |
| Unit 1-Intro. A/P(Human Body Orientation) | August 12 | Unit 7-Sensory System | December 16 |
| Unit 2-Cells and Tissues | September 9 | Unit 8-Endocrine System | January 14 |
| Unit 3-Integumentary | October 14 | Unit 9-Immune System | February 10 |
| Unit 4-Skeletal System | October 28 | Unit 10-Circulatory/Respiratory | March 20 |
| Unit 5-Muscular System | November 11 | Unit 11-Digestive/Excretory | April 21 |
| Unit 6-Nervous System | December 2 | Unit 12-Reproductive system | May 12 |
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|  |  |  |  |

Final Exam (May)

The last week of school during semester 1 & during semester 2 students will be given a final exam.

**VIII. Virtual Classroom Expectations:**

Come to class on time prepared to focus. Follow the link on Google classroom meet to join the class; mute mic and create a fun virtual background. At all times everyone in this classroom will conduct himself or herself in a professional manner. ANY deviation from acceptable behavior shall require immediate attention up to and include removal from online class; at which time all work will be completed from the google resources online. This will be a fast paced semester…So due dates are FINAL. Work will only be excepted while we are currently on the unit. If you have a “special” consideration please contact me privately. A student receiving a grade of 70% or below on any graded work is expected to see me for assistance. Come prepared to discuss how to improve your performance or questions regarding additional practice.

**Class Rules:**

Be respectful, Be prepared, Be kind, Be safe, Be punctual, Work hard, Don’t procrastinate. Do your own work.

## Notebooks/Note-taking:

There are notes associated with each unit in this class. Online are the PowerPoints and guides. You can print the guided notes if needed. Daily complete the learning goal questions and/or left side questions after instruction is complete due at the end of each class day.

**Quizzes/Labs**:

Vocabulary Root Word Quizzes will be given each Friday. The Lists are posted on the first day of each unit.

In this class we will do labs; unfortunately until we can meet safely in person they will have to be virtual.

## Make-up Policy

MAKING UP MISSED ASSIGNMENTS OR TESTS It is the student’s and parent’s responsibility to make arrangements for make-up work. Students should check the google classroom for any missed assignments on the first day they return from an absence.

## Deficiency Notices and Progress Reports

The student will periodically receive from the teacher GRADE PROGRESS reports and DEFICIENCY NOTICES. You should review with your parent(s) or guardian(s) **AND** they must sign and return both the GRADE PROGRESS REPORT and DEFICIENCY NOTICE on or before the assigned due date.

**Expectations for Technology:**

Be prepared to work from your technology this semester; either at home or in class. This technology can include a smart phone, laptop, or tablet. If you don’t have adequate resources please let me know. There are supplies available (ie. Hotspots, Chromebooks, school supplies and paper resources, as needed)

**Academic Integrity**

The Atlanta Board of Education recognizes that academic integrity is the foundation of academic excellence and student success. It is the responsibility of every student and employee to exhibit honesty, trust, fairness, respect, and responsibility in academic work at all times to support a positive learning environment in the school. Violations of [board policy JFA Academic Integrity](http://www.boarddocs.com/ga/aps/Board.nsf/goto?open&id=9CKTW868A3B2) shall be handled as violations of the student code of conduct and addressed via the progressive discipline guidelines in the Student Handbook.

**Parent Expectations**

Parental communication and involvement is essential to the success of all students. We fully welcome your involvement. Parents are encouraged to contact the teacher for updates and concerns. If a parent requests a conference, one will be scheduled as soon as possible via zoom, FaceTime, or phone call.

**IX. MJHS is an IB school:**

The aim of all IB programs is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.

As IB Learners we strive to be: Inquirers, Knowledgeable, Thinkers, Communicators, Principled, Open-Minded, Caring, Risk-Takers, Balanced, and Reflective.

We focus on key Approaches to Learning, where students focus on the following skills: THINKING, COMMUNICATION, SOCIAL, SELF-MANAGEMENT, and RESEARCH.

In addition, the IB Approaches to Teaching skills are based on inquiry; focused on conceptual understanding; developed in local and global contexts; focused on effective teamwork and collaboration; differentiated to meet the needs of ALL learners; and informed by formative and summative assessment

PLEASE Complete this google form to confirm the receipt of the information above for the Fall 2022 Semester.