

Anatomy & Physiology

STUDENT GUIDE 2019-2020

Mr. T.W. Steward, Room 07-003

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Course Description:

This is a two-semester course that investigates in detail the structure and function of humans. The course is primarily designed for students of health care professions, biology or physical education. We will utilize a “system” approach, examining each organ system at the cellular, tissue, organ and system levels, and discuss interactions with other systems. Emphasis will be placed on the homeostatic rather than the dysfunctional individual. Lab fee is required.

GENERAL COURSE OBJECTIVES

Upon successful completion of this course the student will be able to:

1. correctly utilize the technical terminology to describe anatomical positions, directions, planes, cavities and regions.
2. describe the physical, chemical and biological principles that contribute to the homeostatic functioning of the human body.
3. recognize various specific tissue types using a light microscope, and be able to describe their structures, functions and locations in the body.
4. recognize (from models, drawings, descriptions, and dissections) and describe the structures and functions of histology, the integumentary, skeletal, muscular, cardiovascular, nervous, special senses, endocrine, lymphatic and immune, digestive urinary and reproductive systems.

Major Topics and Concepts: Course will include, but not be limited to the following topics

Unit 1: Human Body and Orientation <ul style="list-style-type: none">●Terminology●Body cavities and planes●Homeostasis●Basic chemistry	Unit 2: Cells and Tissue <ul style="list-style-type: none">●Differentiate cells●Classify tissues●compare and contrast tissues
Unit 3: Integumentary System <ul style="list-style-type: none">●Structure and functions of the integumentary system●Structure and function of secondary structures	Unit 4: Skeletal System <ul style="list-style-type: none">●Bone tissue●Maladies of skeletal tissue●Identifying bones and bone marks

<p>Unit 5: Muscular System</p> <ul style="list-style-type: none"> ●Structure and function of skeletal muscles ●Identify major muscles 	<p>Unit 6: Circulatory System</p> <ul style="list-style-type: none"> ●Describe human blood ●Describe hemostasis ●Heart anatomy and physiology ●Describe heart sounds and EEG's ●Identify major blood vessels ●Describe blood flow ●Blood and circulatory pathology ●Fetal circulation
<p>Unit 7: Respiratory System</p> <ul style="list-style-type: none"> ●Describe hemostasis ●System anatomy and physiology ●Lung and respiratory pathology ●Relationship between cardiovascular and respiratory systems. 	<p>Unit 8: Nervous system</p> <ul style="list-style-type: none"> ●Major divisions ●Describe the anatomy and physiology of CNS and PNS ●Describe the structure and function of the Sympathetic and Parasympathetic nervous systems
<p>Unit 9: Sensory Organs</p> <ul style="list-style-type: none"> ●Describe the anatomy and physiology the organs of the Special Senses 	<p>Unit 10: Endocrine System</p> <ul style="list-style-type: none"> ●Describe the anatomy and physiology of the Endocrine System ●Describe the functions of major hormones ●Describe diseases of the endocrine system
<p>Unit 11: Lymphatic and Immune Systems</p> <ul style="list-style-type: none"> ●Describe the anatomy and physiology of the Lymphatic system ●Describe the human immune system ●Describe the pathology of the immune system 	<p>Unit 12: Digestive System</p> <ul style="list-style-type: none"> ●Describe the anatomy and physiology of the Digestive system ●Describe the tissues of the digestive system ●Describe the pathology of the digestive system ●Describe the processing of ingested materials
<p>Unit 13: Urinary System</p> <ul style="list-style-type: none"> ●Describe the formation of urine ●Describe the anatomy and physiology of the urinary system ●Describe the pathology of the urinary system 	<p>Unit 14 Reproductive System</p> <ul style="list-style-type: none"> ●Compare and contrast the anatomy and physiology of the male and female reproductive systems ●Describe the process of human development ●Describe the pathology of the reproductive system

Attendance:

Students are expected to come to class prepared and on time. It is very important for you to come to class daily. We will be covering/reviewing information every day. Students who are not here will find it very difficult to make up their work without falling behind.

Please follow the posted classroom rules and most importantly **do not talk while the teacher is talking.**

Keeping up with class:

It will be your responsibility to catch up on any work missed due to absence from class, no matter the reason. There will be several ways that you can access class information and help.

- *In the classroom:* The daily agenda will be posted on the board in the same place every day. Individual assignments can also be accessed on **Canvas** and on the website associated with the textbook. Please remember it is **your** responsibility to keep up with your papers. Office Hours will offer tutoring/makeup/remediation you may need for any of your classes. All students are expected to complete all assignments on time and to put forth their best effort.
- *Outside of the classroom:* I will be using the online program provided by the school district for recording all grades. This will allow you and your parent to see your most current class grade and attendance. **Canvas** will be used so you may access copies of notes or other missed classwork, as well as having descriptions of assignments and due dates.

Behavior:

To ensure that all students have a safe and effective learning environment, students will be expected to behave in a respectful manner towards everyone else in the class. Failure to abide by the classroom or school policies will result in the following consequences: warning, both visual and verbal, calls home and referral.

Contacting me: My contact information is listed above. The most efficient way to contact me is through county email. I try to check my email at various times throughout the day and will strive to answer messages in a timely manner. Parents please feel free to contact me at any time.

I hope that you come to this class with an open mind and the desire to work hard. Please understand that I am here to teach and to help you. If you feel that you are falling behind or do not understand a concept, please come to me.

I am looking forward to WONDERFUL YEAR, I hope you are as well. 😊