

# Honors Anatomy and Physiology Lassiter High School

## SUMMER ASSIGNMENT

**Course Summary:** This course provides a comprehensive study of the anatomy (structure) and physiology (function) of the human body. This is a *fast-paced, honors course* that requires a great deal of both memorization and application of content. Required laboratory work will include dissection of preserved specimens, microscopic study, physiological experiments, and computer simulations. Upon completion of this course, students should be able to:

1. *Describe the major anatomical components of each human body system, describe their anatomical locations and structures, and explain their physiological functions at both the organ and cellular levels.*
2. *Describe the regulation of the human body and explain how body systems are interrelated to one another.*
3. *Apply the concepts learned through recorded videos and classroom lectures to understand and analyze laboratory investigations and observations.*

**Summer Assignment Background:** Why do you have a summer assignment for A & P? For many students, taking Anatomy and Physiology is similar to learning a foreign language – you must memorize the definitions of unknown terminology and be able to apply them correctly. Many terms in the biological sciences are compound words; that is, words made up of one or more roots and appropriate prefixes and/or suffixes. Prefixes are placed before the root term and suffixes are added after. These combining forms are most often derived from the ancient Latin or Greek languages. *Less than 400 roots, prefixes and suffixes make up more than 90% of the medical vocabulary!* Being able to recognize the meaning of word parts will provide students with clues to the meaning of complex scientific terms, functions, and processes.

The attached list includes the most common word parts used in anatomy and physiology. If you enter this course already familiar with the provided terms, you will find your *progress in learning anatomy and physiology to be **faster*** and your *depth of understanding **stronger!***

**To receive credit for this summer assignment:**

- All answers must be WRITTEN IN PEN OR PENCIL.
- All sections must be complete.
- All examples should be related to the field of Anatomy and Physiology.
- Identical/copied work will receive a ZERO.

**This Packet Belongs To:** \_\_\_\_\_

# Common Prefixes

<b>Prefix</b>	<b>Meaning</b>	<b>Example (s)</b>
a-; an-		
ab-		
ad-		
ante-; pre-; pro-		
anti-; contra-		
brady-		
con-; syn-; sym-		
dia-; trans-		
dys-		
ecto-; exo-; extra-		
en-; endo-; intra-		
epi-		
hemi-		
hyper-		
hypo-		
inter-		
macro-		
meso-		
meta-		
micro-		
mono-; uni-		
multi-		
neo-		
nulli-		
oligo-		
para-		
peri-		
poly-		
post-		
re-		
retro-		
sub-; infra-		
super-; supra-		
tachy-		

# Common Combining Forms (Roots)

Root	Meaning	Example (s)
abdomin; lapar		
aden		
angi; vas; vascul		
arthr		
carcin		
cardi		
cephal		
col; colon		
crin		
cyan		
cyt		
derm; dermat; cutane		
enter		
erythr		
esthesi		
fibr		
gastr		
gen		
gynec		
hem; hemat		
hepat		
hist		
hydr		
leuk		
lip		
nas; rhin		
nephr; ren		
neur		
or		
osteo		
path		
ped		
phag		
phas		
phob		
plas		
pneum; pneumon		
scler		
ur; urin		

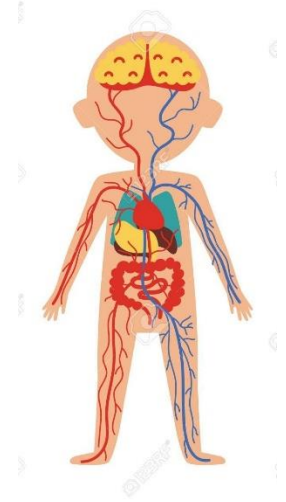
# Common Suffixes

Suffix	Meaning	Example (s)
-ac; -al; -ar; -ary; -eal, -ous, -ic; -tic		
-algia; -dynia		
-e; -us		
-ectomy		
-emia		
-genesis		
-ia; -ism		
-icle; -ole; -ula; -ule		
-itis		
-ium		
-lysis		
-malacia		
-megaly		
-oid		
-oma		
-osis		
-penia		
-phil; -philia		
-plasty		
-poiesis		
-ptosis		
-rrhage; -rrhagia		
-rrhea		
-rrhexis		
-scope		
-scopy		
-stasis		
-stomy		
tachy-		

# Honors Human Anatomy and Physiology

## Course Materials

**COURSE DESCRIPTION:** The Honors Human Anatomy and Physiology curriculum is designed to continue student investigations that began in grades K-8 and high school biology. The curriculum for this course is extensively performance and laboratory based. It integrates the study of the structures and functions of the human body within various areas of study. This includes organization of the body; protection, support and movement; internal coordination and regulation; and growth and development. Medical careers and individual case studies will be emphasized throughout the course. It is important for students to be in class everyday as attendance is essential for success. Topics will be explored through inquiry, discussion, laboratory activities, and research into real-world applications.



**COURSE MATERIALS:** Due to the nature of this course, you will need to supply certain equipment that will be used throughout the year. Please bring the following items within the first week of school. Make sure your name is written in Sharpie on all items.

[1 Box of Disposable NITRILE Exam Gloves](#)

Last Name A – P Size Small or Medium

Last Name Q – Z Size Large or X Large

1 Box of Colored Pencils

1 Container of Disinfectant Wipes

Last Name A – H 1 Bottle of Multi-Purpose Cleaner

Last Name I – P 1 Box of Tissues

Last Name Q – Z 1 Roll of Paper Towels

**Have questions? Please reach out to Mrs. Koester**

[Meredith.Koester@cobbk12.org](mailto:Meredith.Koester@cobbk12.org)