The Well-Trained Mind Academy
Anatomy & Physiology

Required Text
Shier, D., Butler, J., & Lewis, R. Hole's Essentials of Human Anatomy & Physiology. 13th edition. New York, NY: McGraw-Hill, 2017.
Text ISBN: 978-1259277368
(Note: Any of the newer editions will work too though keep in mind our pages numbers might not match up.)

Course Description:
This course will provide a thorough survey of the parts & functions of the human body. Course content includes but is not limited to the cellular basis of life, tissue structure & function, the human life cycle, and the inner workings of the following body systems: integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic & immune, digestive, respiratory, urinary, and reproductive systems.

Course Goals:
Upon completion of Anatomy & Physiology, successful students will have a solid foundation in all the major physiological systems of the body as well as all major anatomical structures. Students will be adept at making predictions and applying their knowledge to real-world situations.

Grading:

Homework	15%	**Quizzes**	15%
Team Project	10%	**Unit Tests**	20%
Research Paper	10%	**Midterm Exam**	10%
		Final Exam	20%

Example Schedule:

Week	**Lecture 1**	**Lecture 2**
FALL SEMESTER		
1	Intro/Course Expectations	Organization & Maintenance of Life
2	Organization of Human Body	Structure of Matter
3	Chemical Components of Cells	Parts & Functions of Cells
4	Cell Membranes: Structure & Function	Cell Cycle & Cell Division
5	Cellular Energetics & Enzymes	Review
6	Cellular Respiration	DNA/Protein Synthesis
7	Tissues I	Tissues II
8	Integumentary System I	Integumentary System II
9	Bone Growth & Function I	Bone Growth & Function II
10	Skeletal System I	Skeletal System II

11	Muscle Structures & Functions I	Muscle Structures & Functions II
12	Major Muscles I	Major Muscles II
13	Nervous System Function I	Nervous System Function II
14	Team Project Presentations	Team Project Presentations
15	Nervous System Anatomy I	Nervous System Anatomy II
16	Midterm Review	Midterm Review
SPRING SEMESTER		
17	Sensation I	Sensation II
18	Sensation III	Endocrine System I
19	Endocrine System II	Endocrine System III
20	Blood I	Blood II
21	Cardiovascular System I	Cardiovascular System II
22	Cardiovascular System III	Lymphatic & Immune Systems I
23	Lymphatic & Immune Systems II	Lymphatic & Immune Systems III
24	Digestive System & Nutrition I	Digestive System & Nutrition II
25	Digestive System & Nutrition III	Review
26	Respiratory System I	Respiratory System II
27	Respiratory System III	Urinary System I
28	Urinary System II	Water & Electrolyte Balance
29	Reproductive Systems I	Review
30	Reproductive Systems II	Pregnancy, Growth, & Development I
31	Pregnancy, Growth, & Development II	Pregnancy, Growth, & Development III
32	Cumulative Review	Cumulative Review

Homework:
The homework grade is divided into the following types of assignments:

1. **Chapter Review Questions**: students will complete & post their responses to the assigned chapter review questions from their textbook each week.
2. **Discussion Board Posts:** when assigned, students will provide an original response to a prompt located in the Discussion Board section of the course website. Students will also be required to read & respond to their peers' posts throughout the course.

Team Project:
Students will work in small groups to research and present an integrated topic of their choice based on what we have covered in class during the fall semester. Presentations will occur during the last week of class before winter break.

Research Paper:
Students are required to research & write a 4-6 page paper that traces the historical development of the diagnosis & treatment of a specific disorder of the human body. Students will choose their topic in January then work throughout the second semester to locate sources, create an outline, write a rough draft, edit/revise their draft, and finally submit a final paper in May. More information regarding expectations will be provided to the students near the end of the first semester.