Textbook:
The course textbook is *Hole’s Anatomy and Physiology*, Shier, Butler, Lewis, 13th Edition 2013, McGraw Hill. Students will have digital textbook access through the internet (registration code will be provided by the teacher when ready). There WILL be assignments on the online textbook, so registering is NOT optional. There is a classroom set.

Purpose:
Anatomy and Physiology covers one of the most fascinating subjects possible, the human body and how it works. A&P is a course that forms a background for everyday living for students. A&P is also often taken as a “background” class for students wishing to pursue further studies in the medical science field. While this is NOT an Advanced Placement or honors course, it is challenging because of the abundant terminology and interactions between systems that are prevalent throughout the course.

Grading:

<table>
<thead>
<tr>
<th>9 Weeks Grading Period</th>
<th>Semester Grade</th>
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<tbody>
<tr>
<td>Daily Work</td>
<td>40%</td>
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<tr>
<td>Labs, Quizzes, Projects and Tests</td>
<td>60%</td>
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<tr>
<td>1st Nine Weeks</td>
<td>40%</td>
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<tr>
<td>2nd Nine Weeks</td>
<td>40%</td>
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<td>Final Exam</td>
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Learning Guide/Calendar:
At the beginning of each unit, the student receives a learning guide with learning targets and a tentative assignment schedule. Students know dates to study for quizzes and exams, as well as the due dates for assignments. The dates are subject to change based upon the class’s progress.

Google Classroom:
Here you will find notes, lab reminders, and useful links among other things. It should aid in your learning progress.

Daily Work:
Work in class may be done individually or in small group collaboration per teacher’s instructions. Each student must know the concepts and processes in order to be successful in this class. **COPYING ANOTHER STUDENT’S WORK IS CHEATING!** (This includes group work).
The best way to prepare for the quizzes and tests is to keep up with daily work, focus on class activities and discussions, and review material at home before exams.

Daily work may be graded as a completion grade.

| Work completed on time and presented before graded in class | 100 |
| Work completed and presented after graded in class (before unit test) | 70 |
| Work not complete | 0 |

**Note Checks:**
There will be one opportunity for a daily grade each non-testing week (Friday, beginning of class) in the form of a note check. Students will be allowed to use any handouts or hand written notes on the note checks (NO PHONES). If a student does better on the unit test than on the note checks, all note check grades will be replaced with the higher grade.

**Projects:**
Throughout the semester, projects will be assigned. Projects will count as major grades. A detailed information sheet on the expectations and grading scale will be handed out when the project is assigned. IT IS THE RESPONSIBILITY OF THE STUDENT TO KEEP UP WITH THE ASSIGNMENTS BY CHECKING THE ASSIGNED DUE DATES!! Projects are due on the due dates. Projects turned in late will lose 10 points per day. After the fifth day, a 0 will be entered into the gradebook.

**Laboratory:**
Each student will be performing hands-on activities to assist them in understanding the concepts presented in class. Most labs will be conducted in groups of two or three.

**Lab Safety:**
Lab safety is a major priority. Each student will be expected to wear goggles at all times in the lab. Failure of a student to wear goggles or to comply with safety rules may result in removal of the student from the lab. Alternative assignments may be given. If a student is absent on lab day, he/she must make arrangements with the instructor to make-up the lab within 3 days. It is the responsibility of the student to see the instructor and make arrangements for the lab make-up. A specific make-up session may be set for a particular lab; students who miss the lab must attend this session. **Students are to be aware that dissection is an integral part of the course and are expected to participate in dissection labs.**
**Make Up Policy:**
Each student is responsible for all materials presented in lecture, lab, or assigned in the text. It is the student’s responsibility to obtain the make-up work missed, to do the assignments, and to turn in the work to the instructor (refer to the Learning Guide and Google Classroom). Each student has a unit calendar and each day’s activities are posted in a binder in the classroom.

All work is due on the assigned date or it is considered late. If the student is not in class the day the assignment is due because of an excused absence, the work is due the day the student returns to class. If absent due to a school activity, school policy dictates that all work be turned in BEFORE the absence. Make arrangements with your teacher.

If an assignment is assigned while the student has a school-approved absence then the student will have one additional day per day(s) absent. Laboratory make-up is done by scheduling time with the instructor after the student returns. Unless a specific lab make-up session is set, labs must be made up within 3 days of the absence to prevent chemicals from becoming inactive and to allow quicker clean-up of lab equipment and materials. If there are any questions, the student may talk to the instructor.

**Test Make-up Policy:**
1. A test must be made up the first **THURSDAY** after missing the test.
2. If a student cannot make up the test on the first Wednesday/Thursday following the test, the following must occur or the student will lose his/her make-up privilege:
   a) The student must give a 24-hour written notice (in advance) to the teacher. The written notice must include the reason for missing the test. The teacher must approve the notice in order to be able to make the test up the following week.
   b) If a student has 3 or more excused absences during the later part of the unit, the student may have 2 weeks to complete a make-up test.
3. The student is responsible for each of the following. If any of the following items are not properly followed, the student may lose his/her make-up privilege.
   a) **BE ON TIME!!!** A test will **NOT** be administered if the student is more than 5 minutes late.
   b) **Student ID required.** Students must show their student ID or driver’s license to be able to take a make-up test.
   c) The student **MUST** know the title of the test he/she is to make up when signing in to take the test.
   d) The student **MUST** have his/her own writing utensils at the time of the make-up test.
4. Cell phones and other electronic devices are to be turned off and put away in your backpack during testing. Any devices in the student’s position can null and void the test. Please refer to
the Plano East Honor Code.
5. During testing all books, etc. must be on the floor at the front of the room. Only students taking tests will be allowed in the room while tests are given.

**Test Remediation:**
After students take a test there will be an opportunity **IN CLASS** to improve the test grade. If you are absent on the day of a quiz or test, you may lose the opportunity for small group remediation.

**Tutorials:**
Monday 8:30 am rm B5-104
Monday 4:15 pm rm B5-211
Wednesday 4:14 rm B5 2-13

**Cell Phones/Ear buds:**
Cell phones may be used for instructional purposes only, **AT TEACHER DISCRETION**. If a student is unable to comply with this rule, a place in the room will be provided to store the cell phone until the end of class. Repeated violation of the cell phone policy may result in the phone being taken up for the class period or turned into sub school for parent pick-up. Refusal to give the teacher a cell phone upon request is an automatic subschool referral.
Use of earbuds, headphones and other electronics are for instructional purposes only.

**Code of Conduct:**
***Any test, quiz, or assignment that is handed in under your name alone is to be your work alone.***
Since most lab work is done in groups, you may consult with your group members regarding the analysis and discussion of the lab. It is considered cheating to use old projects, or other written work from students who have taken this course in the past to prepare an assignment for a grade. Cheating on any work will result in a nonnegotiable zero for that work. That zero may not be made up or cancelled out with extra or alternative work.

**Anatomy & Physiology Behavior Contract**

**When you are in my classroom, the following expectations must be met:**
1. Demonstrate respect for yourselves, your fellow students and the teacher and school property.
2. Follow directions and lab safety rules.
3. Be on time.
4. Please, no food or drinks. Water is fine.

**If you choose not to meet these expectations, the following discipline plan is in effect:**
Level 1: Verbal Warning (possible parent call)
Anatomy & Physiology Guidelines
Plano East Senior High School

Level 2: Detention (Parent call)
Level 3: Referral to SubSchool Principal and/or removal to ISS

Certain actions have automatic severe consequences and will result in an automatic referral to the SubSchool Principal. Examples would be: fighting, use or possession of alcohol/tobacco/illegal drugs, possession of a weapon, vandalism, overt defiance and stopping a class from functioning.

Tardies will follow the posted Plano East Tardy Policy.

All questions regarding expectations not met will be discussed after class.

PARENT OR GUARDIAN AND STUDENT

Student: I have read the guidelines and behavior contract and understand them. I will abide by these expectations while in this classroom. I accept and understand the consequences for choosing not to abide by these rules.

Parents: We have read, reviewed, fully understand, and agree to abide by the guidelines and will accept the consequences for choosing not to abide by these rules.

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<th>(Student Signature)</th>
<th>(Parent Signature)</th>
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Anatomy and Physiology Syllabus

Anatomy and Physiology of Human Systems includes laboratory investigation and fieldwork using appropriate inquiry. This hands-on course is a survey of the structures and functions of the human body and integrates the physics and chemistry concepts found in body systems. In this course the student will investigate the body’s responses to forces, maintenance of homeostasis, electrical interactions, transport systems and energy processes.

Organization and Transport (64 days)
Students will be introduced to the vocabulary of Anatomy and review basic cellular structure. They will use microscopes to explore histology so they can better understand the systems to come. The first dissection in the class will be an exploration of the heart and associated vessels. They will study the cell structure and functions of red and white bloods cells, and discuss the transport of materials around the body. Students will then build a model of the respiratory system, demonstrating the difference between healthy and diseased lung tissue. Students will also model the digestive system, including the connection to the circulatory system, to understand how substances are transported around the body. Finally, students will put what they have learned about each system to evaluate their own lifestyle choices and the effects on health.

Protection (30 days)
Students will dissect a kidney in this unit, and discuss the contents of blood filtrate and how it relates to health. They will study the relationship of the urinary, integumentary and immune systems to protection and waste disposal in the body. Students will build a model of the skin to understand the structures and relate to function, as well as study skin samples under the microscope, to see physical differences. Students will differentiate between the lymphatic and immune systems, as well as understand the connections between them. There will be exploration into immune system dysfunctions, including allergies, immunodeficiency and autoimmune disorders.

Control and Coordination (39 days)
Students will build a model of the human brain, connecting the functions of the different parts. They will study the functions of the central and peripheral nervous systems and how they connect. Students will design activities to demonstrate the function of the synaptic gap. They will test their own reflexes, and develop an understanding of the indication for health. A cow eye will be dissected, and taste and smell will be tested to better understand the function of the senses. Students will study bones in the skeleton to recognize that structure relates to function. They will sort through the joints to understand the differences. They will study the neuromuscular junction, and the sarcomere, and how muscles contract. Students will then take their understandings and create a training plan, demonstrating the role of exercise to maintain health.

Continuing the species (26 days)
This unit is a focused study of reproduction and development of the human being. Activities will help students explain the embryological development of cells, tissues, organs and systems. They will identify the functions of the male and female reproductive systems. They will be able to summarize the human growth and development cycles. In addition, students will study advances in stem cell research such as cord blood use and recognize advances in bioengineering and transplant technology.