

MONTE VISTA CHRISTIAN SCHOOL  
SCIE 4540, Honors Human Anatomy and Physiology  
Course Syllabus

Course Description

This course is an exploration of the principles of the structure and function of the human body at the cellular level. During the course, students will examine the tissues and their function of each body system. The major organs will be examined with an emphasis on the morphology and functional features of the cells and tissues. In addition, students will examine the areas of pathology, study of disease, associated with the organ or system of study. This course will engage students through the understanding of grade level appropriate texts in an effort to connect essential ideas with respect to systemic physiological functions. Dissection and lab work is a key component to recognizing and understanding anatomy and physiology.

Curricular Mapping

This course will build upon student understanding of biology with special emphasis on the structure and function of the human body. Skills in identification of morphological features and understanding the interconnectedness of organ systems will be developed; dissection of cat anatomy will provide “hands-on” experience while exploring comparative anatomy and physiology. Students will be required to be “hands-on” for ALL dissections. Pre and post formative and summative assessments will be employed to measure understanding and skill designed to enable them to be successful in a future college level anatomy course.

Course Objectives

1. Identify the structure and function of the tissues of the human body.
2. Identify the morphological structure and function of the major organ systems.
3. Recognize diseases and/or disorders that affect the major organs.
4. Recognize the role of each organ system in maintaining homeostasis.
5. Write responses to questions, design experiments, write lab reports, research topics and create projects.
6. Organize, read and construct graphs of data.
7. Reflect in writing on their own learning through self-assessments and journal writing.

Text

Your necessary digital texts for this class will be part of a “Required Course Materials Fee” thru the EdTech bookstore. This is a bundle purchase of digital texts for your full schedule of classes and will be available for purchase after 7/18/16. For further instructions please visit the [16-17 School Year](#) icon on the MVCS homepage. Please note: some courses may require additional purchases outside of the course materials fee.

### Prerequisites

Anatomy Honors: 80% or higher in Biology Honors; 90% or higher in General Biology

### Course Outline

1.0 Introduction to Human Anatomy and Physiology

3.0 Cells

4.0 Tissues

5.0 Skin and the Integumentary System

6.0 Skeletal System

7.0 Muscular System

8.0 Nervous System I

9.0 Nervous System II

10.0 Blood

11.0 Cardiovascular System

12.0 Lymphatic System and Immunity

13.0 Digestive System

14.0 Respiratory System

15.0 Urinary System

16.0 Reproductive Systems

### Grading

<u>Grade Book Categories</u>		<u>Semester Weighted Grading Configuration</u>	
Tests & Quizzes	50%	Quarter	40%
Homework	50%	Quarter	40%
		Final Exam	20%

### Explanation of Grade Book Categories

**Homework Expectations-** Students on average should expect to spend 30 minutes per night on homework, excluding projects.

**Late Work Policy-** Assignments turned in late will go down one letter grade each day from whatever the original grade would have been. If the grade is a 95%, one day late it is a 85%.

### High School Standard Grading Policy:

Please refer to the policy and procedures posted online in our Parent-Student Handbook.

## Class Policies

The following class policies are non-negotiable. Please see the instructor if you have any concerns with your ability to follow these policies.

1. **Attendance:** Students are expected to be in class daily. If you are unable to attend, it is your responsibility to get the classwork and homework missed. You will have one day for every day you are out to make up your work – no exceptions.
2. **Tardiness:** Students are expected to be in their seats with their books out and all materials needed ready when the bell rings otherwise you will be marked “Tardy.”
3. **Make-ups:** All make-up work is your responsibility! Make-up work is only accepted from students who have excused illness absences. Being gone from class due to school activities, planned appointments or family vacations, requires your work (homework, make-up labs, and/or exams) to be turned in before your absence. If you do not turn in your work on or before the due date, it is considered late.
4. **Homework:** Students are allowed one school day (not class day) for every day they were absent, due to illness, to get their written work turned in. Late work: to reiterate, if you do not turn in your work on or before the due date, it is considered late.
5. **Restroom:** Students are allowed to leave class to use the restroom at instructor discretion.
6. **Participation:** Students are encouraged to ask questions before, during and after class as well as participate in class discussions. No question is considered trivial. During collaborative learning activities, students are expected to contribute to the cooperative learning. Everyone must actively participate to earn credit.
7. **Labs:** Because of space and time, a lab can only be run during your designated class period on the day it is scheduled. If you are not in class or if you come to class unprepared to enter the lab, you will be unable to do the “hands-on” part of the lab. The next best thing to do is a dry lab. This is done by following the “Dry Lab Format,” provided on a handout.
8. **Dry Labs:** The purpose of the dry lab is to give students an opportunity to master the concepts covered in each experiment, even though the hands-on component of the lab is missing. The questions asked in the dry lab are not intended to be identical to the questions posed on the actual hands-on lab. The dry lab questions are meant to guide you through the “thought process” of what was going on during the hands-on portion of the experiment. These questions may require research to adequately answer. The dry lab protocol is available on a handout.

### **When is the dry lab due?**

- If you were in class, but came without materials or properly attired for lab work, the dry lab is due the next day along with everyone else’s lab.

- If you are going to be gone due to a pre-planned absence, the dry lab is due before you leave on our outing.
- If you were sick on the lab day, you get 1 day for every day you were absent to get your dry lab turned in.

9. **Tests:** Honors level students are required to take a comprehensive final exam, over material covered in first and second semester. If a student is absent on test day, due to illness, he/she must take the test the day they return to class. If a student has been gone several days, due to illness, he/she should come before class begins to make arrangements for a time to take the exam. Students gone the day before a test (Review Day) are required to take the test when they come to class on the day of the test.

10. **Text:** Students are required to purchase the text, which is to be kept for use at home. They may use the class set provided in the classroom, only when class is in session.

#### School Policies and Expected Student Learning Results (ESLRs):

Students are subject to all academic policies of the school as found in the Parent-Student Handbook. Furthermore, it is each student's responsibility to read and follow all academic policies of Monte Vista Christian School. In addition to addressing each ESLR every year, we target a specific ESLR each academic year for particular focus.

#### Tips for the Students

- Students are encouraged to review their notes each night.
- Do all the assigned work in order to receive any extra credit opportunities. Always ask anatomy related questions, during class. Stay in communication with the teacher.

#### Apps Used for Class:

1. Visible Body - Atlas (students may download this through the ARC for free)
2. Additional free apps that relate to relative content may be added

#### Miscellaneous

- Notability notebook will be evaluated and graded about every quarter. It is recommended that you keep your binder up to date and cleaned out weekly.

#### Notability notebook:

1. QOD/Daily Notes
2. Lecture Notes
3. Reading notes – done in Cornell Note-taking style.
4. Labs/Investigations
5. Homework – (excludes labs).
6. Handouts

- You can access your grades on Focus. (Parents – the grade you see in Focus during first two weeks of any quarter might not be indicative of your student’s final grade.)
- All essays need to be in APA formatted, double-spaced and written in Times New Roman with a size 12 font. Margins should be set at 1” on all sides.
- Your iPad will need to be present in class every day and should be charged sufficiently to make it through class. The iPad can be used for note taking and will be often utilized for various in class work.