

Monte Vista Christian School
SCIE 1521 Biology
Course Syllabus

Course Description:

This class will explore and study of the definition of life and the processes of life. The main unifying themes include a detailed study of the basic cellular structures and processes of living organisms, as well as detailed investigation of plants and animals, along with their relationship to the environment. Laboratory dissection and fieldwork is required.

Curricular Mapping:

This course will continue to increase appreciation and love for God as creator through study of His intricate design of life. The basic methods of scientific study and research will be developed more thoroughly. Students will learn extensive biological vocabulary and processes. Students will be expected to complete several projects during the year.

Course Objective:

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

1. Examine and evaluate the scientific and biblical worldviews.
2. Understand the limitations of science.
3. Compare the structures and functions of living organisms in a lab setting.
4. Develop their psychomotor skills in laboratory exercises.
5. Care for and operate the compound microscope through a variety of lab exercises.
6. Utilize scientific methodology, such as observation of natural phenomena, formulation of hypotheses, experimentation, and data analysis.

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:

None.

Course Outline:

Unit 1 Introducing Biology

Unit 2 Cells

Unit 3 Photosynthesis and Cellular Respiration

Unit 4 Mitosis and Meiosis

Unit 5 Genetics

Unit 6 Evolution

Unit 7 Ecology

Unit 8 Classification and Diversity Unit

Unit 9 Bacteria and Viruses

Unit 10 Protists and Fungi

Unit 11 Plants

Unit 12 Animals (Vertebrate and Invertebrate)

Class Policies:

1. Respect your peers, teachers, and school property to create an enjoyable and learning environment.
2. Do your own creative work.
3. Stay focused on your creative work.
4. Come to class prepared, on time and excited to learn.

Grading:

<u>Grade Book Categories</u>		<u>Semester Weighted Configuration</u>	
Assignments	50%	Quarter	40%
Assessments	50%	Quarter	40%
		Semester Final	20%

Category Explanation:

- Assessments – 50%

This category includes all unit tests. Quizzes and projects may be included in this category according to teacher discretion. Students may view the exact category online on FOCUS.

- Assignments – 50%

This category includes all daily homework. Some projects and laboratory write ups may be included in this category according to teacher discretion. Students may view the exact category online on FOCUS.

Homework Expectation:

Students are expected to spend about 3-4 hours a week working on anything related to this class. This might include working on homework, reading the textbook, creating flashcards, and studying for tests.

High School Grading Policy:

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

Classroom Expectations:

Students are expected to understand these rules:

1. Be seated at the beginning of class with iPad charged and ready.
2. Raise your hand, then wait until called upon before speaking
3. Use the bathroom before class starts.
4. Turn in any homework at the beginning of class.

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:

Attendance and Tardies- It is important that you be in class. Your participation is valued. Nothing can take the place of being in class, hearing the lectures, seeing the demonstrations and videos, doing the laboratory experiments and interacting with your classmates. If it is necessary for you to be absent from class, it is your responsibility to get the notes from a reliable classmate. You will be held responsible for everything that went on in class. You will also need to pick up and/or access online any handouts that were given out. Follow your chapter outline and do the assigned reading and homework. Unexcused absences are reported to the office and will affect your grade.

Make Up Work- Students are expected to turn in all assignments on time on Google classroom unless they have an excused absence for illness or other important circumstances. If an assignment is late, students will be marked down at least 50%.

When working in the biology lab:

1. No long hanging necklaces, bulky jewelry, or excessive bulky clothing.
2. Read the lab before coming to class. Review safety precautions before you begin.
3. Only use the materials and equipment authorized.

4. Remain at your lab station at all times. Do NOT go to another student's station to work with them just because your partner is absent that day.
5. NEVER bring food or beverage into the lab.
6. Know the proper fire drill procedures and where the fire equipment is located and how to use the equipment.
7. Know the proper earthquake procedure when in the lab.
8. Work areas and apparatus must always be kept clean and neat.
9. ALL accidents must be reported to the teacher immediately, no matter how minor.
10. NEVER WORK ALONE IN THE LABORATORY. You should only be in the lab under the supervision of your teacher and with your assigned class.

Tests- If the student is in class on exam day, they are expected to be ready to take the exam.

Missing the review session is no excuse. If absent on exam day, the day you return to class you must take the makeup exam. Exam dates are announced at least one week in advance, so students can plan their schedules accordingly.