## **Course Description:**

This course exposes students to the fundamental concepts of biology.

### Course Standards:

By the time the student completes the course of study he or she will be able to:

- 1) Develop and use models for the transfer or sharing of electrons to predict the formation of ions, molecules, and compounds in both natural and synthetic processes.
- 2) Obtain, evaluate, and communicate about the positive and negative ethical, social, economic, and political implications of human activity on the biodiversity of an ecosystem.
- 3) Develop and use models that show how changes in the transfer of matter and energy within an ecosystem and interactions between species may affect organisms and their environment.
- 4) Ask questions, plan, and carry out investigations to explore the cause and effect relationship between reaction rate factors.
- 5) Obtain, evaluate, and communicate data showing the relationship of photosynthesis and cellular respiration; flow of energy and cycling of matter.
- 6) Construct an explanation of how the process of sexual reproduction contributes to genetic variation.
- 7) Obtain, evaluate, and communicate evidence that describes how changes in frequency of inherited traits in a population can lead to biological diversity.
- 8) Gather, evaluate, and communicate multiple lines of empirical evidence to explain the mechanisms of biological evolution.
- 9) Engage in argument from evidence that the net change of energy in a system is always equal to the total energy exchanged between the system and the surroundings.
- 10) Engage in argument from evidence that changes in environmental conditions or human interventions may change species diversity in an ecosystem.
- 11) Ask questions and/or make predictions based on observations and evidence to demonstrate how cellular organization, structure, and function allow organisms to maintain homeostasis.
- 12)Obtain, evaluate, and communicate information about the causes and implications of DNA mutation.
- 13) Construct an explanation for how cellular division (mitosis) is the process by which organisms grow and maintain complex, interconnected systems.
- 14)Obtain, evaluate, and communicate the ethical, social, economic and/or political implications of the detection and treatment of abnormal cell function.
- 15) Engage in argument from evidence regarding the ethical, social, economic, and/or political implications of a current genetic technology.
- 16) Engage in argument from evidence regarding the ethical, social, economic, and/or political benefits and liabilities of energy usage and transfer.
- 17) Engage in argument from evidence about the availability of natural resources, occurrence of natural hazards, changes in climate, and human activity and how they influence each other.
- 18) Engage in argument from evidence regarding the ethical, social, economic, and/or political implications of a current genetic technology.

<u>Classroom Expectations</u>: In addition to strictly following the DVUSD "Students Rights and Responsibilities Handbook, I expect the following to occur in my classroom:

Choose a Positive Attitude - have a positive mindset, open to others ideas.

**Respect people and space** - speak kindly to everyone, clean up after yourself and treat materials with care.

**Listen** - When someone is speaking, look and listen.

Participate - put your phone away and interact with the class, come to class prepared.

Ask for help - if things get tough, don't give up. Get help or ask questions right away, don't wait.

## Grade Book Weighting: (District Wide)

80% Assessment – Include tests, quizzes, projects, labs or other items that show a summative understanding of the students' knowledge.

20% Coursework – Includes in class assignments that are graded on accuracy. Students will have multiple practice opportunities or multiple attempts for these types of assignments.

0% Practice – Includes daily activities used to help the students understand the content without penalty.

## **Grading Scale**

<u>Absences</u>: After an absence, a student has one school day for each day missed to make up work/tests, regardless of the number of days absent. If many days were missed, please schedule an appointment with me to formulate a plan for the completion of make-up work. Make-up work for extended absences (over 3 days) may be requested through the Counseling Office and picked up there.

# <u>Late Assignments Policy</u>: In order for **Late Work** to be accepted, students must meet the following parameters:

Assignment is not due within the class period

Assignment is not a timed activity (such as a Quick-Write Essay)

Assignment is not a Long-Term assignment (over multiple weeks)

Assignment is turned in by the end of the instructional unit

All assignments are given a due date, and a zero is filled in once the due date is passed. Although assignments can be turned in after that date the point of these assignments is to expose students to content and help them obtain mastery of that content through timely practice so that they are successful on high stakes exams. Not completing assignments as assigned and submitting them late, hurts the student's abilities to achieve mastery as they may go into assessments without feedback and practice. Having late work also causes students to have to play "catch up" which causes additional stress on the student.

<u>Classwork Policy:</u> In-class assignments may be due by the end of the class period. You will receive time to complete in class.

## <u>Test Retakes – Assessment Category Only</u>

The student completes another assessment of the same learning targets. The assessment will be a different format and will be at the same difficulty level. The higher of the two scores will be entered in the gradebook.

To earn a retake opportunity, a student must complete all of the following:

The student must initiate contact with the teacher within 5 school days of the assessment score being posted.

Submit a remediation assignment and meet a minimum score with multiple submissions available.

Submit all assignment for that unit of study, even if the assignment is in the practice category and not impacting their overall grade.

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### Daily Device Use (iPads)

Students should come to school with their iPads charged and ready to use in each class every day. Devices may not be used to record or take photos of other people without their consent. Consequences for classroom disruptions and misuse of devices will follow a progressive discipline model, beginning with a phone call home and progressing to office referrals for repeated or more serious offenses. See the Student Rights and Responsibilities consequence chart in the handbook for more specific descriptions of infractions and consequences.

## MRHS Laboratory Breakage Policy

The Mountain Ridge Science Department has a policy regarding the damage or breakage of laboratory equipment. In the event a student breaks any laboratory materials, that student will be responsible for paying the replacement cost of each item. A complete list of all laboratory materials and their costs are posted in each classroom. The students are taught proper procedures and laboratory etiquette to ensure the safety of our students during lab activities. This policy helps hold the students accountable for their actions and reinforces careful laboratory procedures.

<u>Suggested Materials:</u> Some sort of paper in an organized binder for which notes can be written and kept for frequent reference. A way to organize and keep handouts, pen and pencil and a basic function calculator are essential materials to have access to. If you have any issues obtaining these materials, contact me immediately.

### Al Statement

In the Deer Valley Unified School District, we are committed to providing our students with the best possible education while ensuring their safety, privacy, and well-being. As part of our ongoing efforts to enhance learning experiences, teachers may incorporate generative Artificial Intelligence (AI) in the classroom for students. Students must adhere to the specific guidelines provided in the assignment details. If no guidance around the use of generative AI is provided, studen m  $\ddagger$  t v