



Deer Valley Unified School District

Mrs. Kim Rodgers
Project Lead The Way
Biomedical Innovation Honors

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Course Description:

In the final course of the PLTW Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent design project with a mentor or advisor from a university, medical facility, or research institution.

Biomedical Innovation is divided into eight real world problems students research, investigate, and create through various labs to develop a solution.

Standards:

Biomedical Innovation Honors is aligned with Arizona Bioscience, Arizona College and Career Ready Standards and/or national standards which supports school-wide efforts to increase student achievement.

Course Objectives:

By the time the student completes this course of study, the student will know or be able to:

- Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem. AZCCRS Standard 7
- Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. AZCCRS Standard 7
- Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally. AZCCRS Standard 2

Essential Standards - Bioscience Standard

- 1.0 Maintain A Safe Work Environment
- Standard 2.0 Demonstrate Standard Operating Procedure (SOPS) In The Laboratory
- Standard 4.0 Demonstrate Critical Thinking And Problem-Solving Skills
- Standard 5.0 Demonstrate Ethical And Legal Conduct
- Standard 7.0 Demonstrate Basic Lab Skills In The Use Of Equipment And Instrumentation
- Standard 8.0 Demonstrate Microbiology Skills
- Standard 13.0 Demonstrate Scientific Measure

Classroom Rules and Consequences:

All students will adhere to the DVUSD Students Rights and Responsibilities Handbook as well as expectations found throughout this syllabus. All students will follow the Respect The Ridge principles: Respect Your Self, Respect The Ridge, and Respect Each Other.

Progressive discipline will be followed: student, parent, and referral unless in concerns of safety. All policies/consequences listed in the Student Rights and Responsibilities Handbook located on [Mountain Ridge High / Homepage](#)

Grade Book Category Weighting: (District Wide)

80% Assessment

20% Coursework

Grading Scale

100% - 90%

89% - 80%

79% - 70%

69% - 60%

59% - 0%

Homework Policy

Coursework and projects may require completion at home. All submissions are due at 7:30 AM unless otherwise noted in Canvas.

No extra credit is available for this course.

Report Cards

In an effort to conserve resources and harness the capacity of our electronic grade reporting program (PowerSchool) district schools will no longer print hard copies of report cards unless requested by individual parents. To request a hard copy of your student's report card, please contact the front office at 623-376-3000. To receive your PowerSchool login, please stop into the office with a valid photo ID.

Power School Online Access:

Grades and attendance may be accessed 24 hours a day online with your Power School access code. Access codes are available in the Counseling Office or Front Desk Monday – Friday 7:00 AM– 3:30 PM. You may check student progress regularly on the PowerSchool site using the same login for one or more students. For Mountain Ridge parents/guardians without home computer access, a computer with guest log-in capability is available in the Counseling Conference Room.

Academic Assistance/Office Hours:

In addition to the Academic Prep times built into our schedule each week, additional assistance/tutoring is provided on a weekly basis both by MRHS and individually by instructors. These office hours will be posted in my classroom, website, and/or Canvas at the start of each week. I will demonstrate to the students how to find my availability each week.

Make-up Policy:

Absences: 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.

Missing Work

An assignment is considered missing work when it is not submitted by the due date.

Missing work will be treated as such:

- The assignment will be marked with the “Missing” special code in the grade book
- A **zero (“0”)** will be entered as the score for the assignment in the grade book
- No Evidence (NE) will be entered for the standards attached to the assignment

Late Work

An assignment is considered late work when the assignment is not submitted by the due date that was established but is submitted within the parameters listed below.

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 within the following time frame (By the end of the Unit)

Test Retakes – Assessment Category Only

The student completes another assessment of the same learning targets. The assessment to be retaken may be in the same format or 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:

- Consult with the teacher
- Submit a reassessment plan or application, if required by the teacher
- The reassessment plan may include all formative coursework related to the content/skill assessed

Reassessment Plan

The student must initiate contact with the teacher within 5 school days of the assessment score being posted. The student must communicate with the teacher to create a reassessment plan.

- 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.

Daily Device Use (Chromebooks)

Students should come to school with their Chromebooks 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.

Recommended Supplies for this Course:

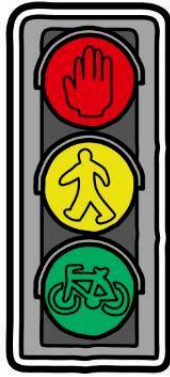
- Pencil/pen/highlighter
- Google Drive created with DVUSD academic email
- Paper Towel
- Tissues
- Disinfectant Wipes

Math/Science Calculator Policy: Students may use calculator for specific assignments and tests as explained in class. A classroom set of scientific calculators are available for students as needed.

AI 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, students should follow the “restrictive” level (see chart). Teachers should direct students to contact their teacher before submitting classwork if the student is unsure if the tool or website they are using is permitted on a specific assignment.

AI Use Traffic Light	Level	Description	Example Instruction
	Restrictive No!	AI tools are prohibited for the assignment, and all work must be the student's original creation.	"Do not use AI tools for this assignment. All content must be original, and any use of AI will be treated as plagiarism."
	Moderate Whoa!	Students can use teacher-approved AI tools from the district list for specific parts of their assignments, such as brainstorming or initial research, but the core content and conclusions should be original. Proper citation is required for any AI-generated content.	"You can employ AI tools to assist brainstorming or initial research, however, the main content, arguments, and conclusions should be your own."
	Permissive Go!	Students can utilize district-approved AI tools to assist in their assignments, such as generating ideas, proofreading, or organizing content. Proper citation is required for any AI-generated content.	"You may use AI tools as you see fit to enhance your assignment and demonstrate your understanding of the topic."

MRHS Laboratory Breakage Policy: The Mountain Ridge Biomedical Science Program 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.

VIDEO PROCEDURES AND CLEARANCE FORM Grades 8-12

Videos, films and other taped materials rated PG/PG 13 (parental guidance) and non-rated may be viewed at school, but they must be:

- An integral part of the curriculum.
- Approved by administration prior to viewing.
- Approved by parent/guardian
- Each student must have a signed "Student Video Parent/Guardian Form" on file noting permission for each PG or PG13 video.

Project Lead The Way utilizes video of clips embedded in the curriculum to reinforce content for students. All clips are non-rated and apply to the academic content. Please let me know if you have questions. The consent form is located on the Syllabus Signature Sheet.