

Syllabus: Biology 1

RCAS Policies/Procedures

Students will be required to follow all RCAS policies and procedures. To view the RCAS High School Student Handbook, click [handbook](#).

Course Description

Biology 1 emphasizes the building blocks of living organisms from molecules to cells, cell structures, cell processes, energy flow, and genetics.

Course Learning Outcomes

Students who complete this course successfully will be able to:

- CLO #1: Learners can explain the course expectations, lab safety and the scientific method.
- CLO #2: Learners can name and identify the 4 main macromolecules and explain or show how the elements and sugar make macromolecules.
- CLO #3: Learners can find the pH of a given substance. Learners can explain or show how the human body maintains homeostasis and give an example.
- CLO #4: Learners can identify plant and animal cells and identify the organelles for both types of cells.
- CLO #5: Learners can explain or show how somatic cells divide including the cell cycle.
- CLO #6: Learners can model how cells use photosynthesis to transform light energy into chemical energy.
- CLO #7: Learners can model the major inputs and outputs of cellular respiration and the chemical process that results in a net energy transfer.
- CLO #8: Learners can explain or show how a DNA sequence determines the structure of proteins used in the body.
- CLO #9: Learners can clarify the role of DNA and chromosomes in coding for traits passed from parents to offspring.

Classroom Expectations

- **Treat each person in the room with respect and dignity.**
- Food and Drink are not allowed when we are doing a lab. If you are eating or drinking in class when approved, please clean up after yourselves.
- Follow all lab safety rules and procedures as they are given.
- You are expected to participate and be attentive during all portions of class. If you are not feeling well, or if a situation arises, please let me know in an appropriate manner so I can be of assistance.
- Assignments are linked on Canvas you can access these from anywhere and at any time.
- If you need to use the restroom or get a drink of water, please ask and if the timing is appropriate and you have permission, fill out a pass and you may go. Please do not leave the classroom without permission or without a pass.
- Please do not get into cabinets or touch any lab equipment or safety devices unless given permission to do so.

- **Cell phones and electronic devices are to be put away during class per school policy. Earphones should be put away and the phones/devices in the classroom cellphone holder. Occasionally you will be given permission to listen to music. You must have permission first, and any issues or disruptions with the device can result in loss of privileges and or office referral.**

Grading

I calculate your grade by weighing tests and daily work equally. Tests will be worth 50 points, Labs will be worth 25 points and assignments will be between 10 for smaller assignments and 20 points for larger assignments. How this works is I will tally up all the points you earn for test grades, labs and assignments. I will then tally the total score and divide by the number of points possible.

Here is a breakdown of how I assign letter grades as per district policy.

A= 90-100%

B= 80-89%

C= 70-79%

D= 60-69%

F= Below 60%

Textbook

Pearson: Miller & Levine Biology Textbook

*Copies are available in the classroom.

<https://sso.rumba.pearsoncmg.com/sso/login?profile=eb&service=https://k12integrations.pearsoncmg.com/ca/dashboard.htm&EBTenant=RCASD-SD>

Reading

Any readings will be available on Canvas. If a physical copy is needed, please discuss with your teacher and they will have one available for the student.

Optional Reading

Any optional readings will be available on Canvas found throughout the modules. Please see your teacher for any questions.

Instructional Resources

Canvas - <https://rcas.instructure.com/>

Gizmos (Online Labs) - <https://gizmos.explorellearning.com/>

YouTube (Online Education Videos) – <https://www.youtube.com>

Savvas (Online class resources) - <https://savvasrealize.com/#/>

*Any other Resources will be found on Canvas throughout the modules. The resources above are the main sources.