

AP BIOLOGY FINAL PROJECT OPTIONS

Task	Due Date
Choose Topic and Project Format	By Monday, May 17th or -10 if not done
Sufficient Progress Check	Thursday, May 29th (-10 if progress not considered sufficient)
Project Complete	Wednesday, June 9th
Presentations	Thursday and Friday, June 10th and 11th

OPTION A: CHILDREN'S BIOLOGY BOOK

1. Choose **one** concept or topic in biology and develop a children's book teaching young children about that topic. Your target audience should be from kindergarten to third grade.
2. The book needs to include both words **and** illustrations.
 - a. You may use humor which is age appropriate.
 - b. Your book must be interesting to kids. I already have elementary teachers that want to see your books. These teachers opinions will taken into consideration with the grading of your work.
 - c. You must have a minimum of 18 graphics in your book and utilize 6 different colors. This may include drawings, paint, crayons, etc. The picture has to help bring out the theme of the story. You will be graded on the quality of your graphic. You may NOT used any graphic cut and pasted graphic from any source unless it is your own original photography. No graphic may be larger than 4.5 inches in width and height.
 - d. Look at the examples to see successful children's books that interweave biology into a good story. The Lorax is a good example of such a book.
 - e. Your typing font must be a minimum size. Produce work no smaller than typing 12 times new Roman font.
 - f. Your book must be a minimum of 15 pages in length and contain a minimum of 400 words.
 - g. Your document may contain no spelling errors. You will receive a 1 point deduction for each spelling error.
3. You may work singly or in pairs.
4. Your book must have an illustrated cover with a "catchy title".
5. Your book must be bound in either in purchased report covers or report binders.
6. I will be doing other work in class, so you need to plan your time accordingly for this project.

Grading Rubric

Task	Value	Points Received
Topic Chosen on Time	10	
Progress Check	5	
Pages of Book Bound Specified	-100 if not done	
Book Length and Illustration Requirements	-100 if not done	
Illustrated Cover with Catchy Title	5	
Book Completed On Time	10	
No errors in spelling or other language component	10	
Accuracy of Information	20	
Quality of Finished Product (no smudges, coloring outside the lines, use of white out, etc.)	10	
Creativity of Work	20	
Presentation of Book	10	
Total Score Received	100	

Option B: Just a Formality (individual student option)

Formal 10 page minimum paper or 35 plus slide PowerPoint presentation on any biology/medicine topic. Note that the bibliography is not required for a PowerPoint presentation. You may not use over size 32 font in your PowerPoint and it must include at least 15 cited graphics.

[Scoring Rubric]

Total Score = _____

Science Content (rigor and accuracy)

90 pts.

**** Uses own words and not cut and pasted**

- 100

Spelling/grammar

-1 per error

Bibliography

10 pts.

Binding/Covering/neatness if paper/

electronic transmission to the instructor

5 pts.

Option C: Captain Video Option (2-3 students)

1. **Create a video (5-10 minutes in length) that showcases the wonderful world of AP biology. The intent is that to use your video as a “recruiting” tool for future AP biology students, or to introduce AP biology at a future open house (so it needs to be understandable and appropriate for parents. Creativity and appropriate humor are encouraged, but the video must be firmly grounded in the reality that is AP biology.**
2. **Create a second video (5-10 minutes in length) on a class/lab topic. Your video must be good enough for this teacher to use!). You must provide a written transcript of 2 or more pages for the second video and references.**

Video Evaluation Rubric (Excellent) 5...4...3...2...1...(Poor)

- is educational 5...4...3...2...1
- is relevant to the audience 5...4...3...2...1
- provides a good insight into topic 5...4...3...2...1
- is creative and entertaining 5...4...3...2...1
- Language is used properly and effectively 5...4...3...2...1
- Images and/ or graphics relate well to content 5...4...3...2...1
- Camera is stable, smooth movements and pans 5...4...3...2...1
- Subject images are well composed and easy to see 5...4...3...2...1
- Sound is clear and understandable 5...4...3...2...1
- Video is edited effectively, flows well 5...4...3...2...1

Score _____ out of 50 X 2 = Total Score _____

OPTION D: An examination of Superhero systems (no partners)

Superheroes (ie. Superman, Spiderman) have their powers because they have evolved extraordinary body systems.. In reality, some of these systems would cause many biological difficulties (excessive blood pressure, hormonal driven hostility, etc.) You would need to solve these system incompatibility issues while deriving a superhero having the powers and abilities you have chosen.. You must provide *detailed* drawings of your superhero and your proposed internal organ arrangement – how did you make everything work correctly? (50 pts.) You must also provide a five or more page *detailed* typewritten explanation of the biological difficulties encountered and *specifically* how you solved them, (50 pts.) so that the hero would be able to function in the manner movies or comics tell us they do.

OPTION E: An examination of a mythological creature (no partners)

Mermaids are imaginary organisms that combine the bodies of two very different critters. In reality, this would cause many biological difficulties: different digestive systems, two hearts, different circulatory systems, different modes of reproduction, different methods of excretion, gills *and* lungs, etc. You would need to solve the system duplication and incompatibility issues. You must provide *detailed* drawings of the creature in question and your proposed internal organ arrangement – how did you make everything work correctly? (50 pts.) You must also provide a minimum five or more page *detailed* typewritten explanation of the biological difficulties encountered and *specifically* how you solved them, so that the creature would be able to function as myths tell us they do. (50 pts.)

Option F: THE ART CORNER - ECOLOGY AND MAN'S IMPACT (no partners)

Many people are concerned with the number of living things that humans threaten due to our activities on this planet. In this assignment you will have the choice of poetry or graphic art to express your opinion on this issue. If you choose this option you must use your own art work and/or photography.

YOUR TASK: Select two of the following options. You are responsible for following the composition rules for each. (45 points for each and 10 pts for presenting your work to the class)

1. **HAIKU.** Choose four DIFFERENT animals or plants. You may do all animals, but not all plants. THESE SHOULD BE SURROUNDED BY A COLLAGE OF PICTURES OF THE ANIMALS (or PLANTS) THAT YOU ARE WRITING ABOUT.
2. **CINQUAIN.** Choose FOUR DIFFERENT animals or plants. You may do all animals, but not all plants. THESE SHOULD BE SURROUNDED BY A COLLAGE OF PICTURES OF THE ANIMALS (or PLANTS) THAT YOU ARE WRITING ABOUT.
3. **QUATRAIN.** Four stanzas minimum. Use the correct form for a quatrain!! This should be surrounded by a single picture or collage of the animals or plants you refer to in the poem.
4. **SONNET.** Use the correct form for a sonnet!! This should be surrounded by a single picture or collage of the animals or plants you refer to in the poem.
5. **One original drawing or painting.** No paint by number. This should have a clearly evident theme. The theme or title should be written on the back of the art and a typed 40 to 60 word summary of what the drawing/painting is depicting should be with it.

After making your selection, you are to produce either the poetry or the artwork you have chosen with one of these themes

"WE MUST SAVE THE _____ FOR OUR CHILDREN."

"The word of the Lorax seems perfectly clear UNLESS someone like you cares a whole awful lot, nothing is going to get better."

"NO ONE CRIED WHEN THE DINOSAURS DIED, WHO CARES ABOUT A CONDOR?"

(For a more macho into RAMBO devotee.)

** You may use another similar theme, but it must be approved by me first.

If you select the poetry, you must follow the composition rules for that type of poem. The poetry and collage should be mounted on a posterboard or a format approved by the instructor.

The original artwork should be in an accepted "art form," (NOT #2 PENCIL ON TYPING PAPER!) and must be on some form of "art" paper. Sculpture is acceptable if PRIOR approval is given by me.

In class on the day this assignment is due, you will do one of the following activities. Hold up your drawing/painting/sculpture and explain it to the class, as well as read one or more of your poems.