

Aquatic Ecosystems Research Report (One written report/student group)

1. Title page
2. **Six** (maximum) content pages. The text should consist of a student-worded analysis of your research during long hours in a library and in the lab.
 - a. **Background.** A review of literature on some aspect of aquatic microecosystems. (See topics on the BIOL 215 website.) Put everything *in your own words* with the proper citation in parentheses: **do not** quote directly from other works. (12 pts)
 - b. **Materials and Methods.** Include water source and microscope and camera equipment used. (5 pts)
 - c. **Results.** Use prose to describe results and reference tables or graphs that illustrate your description. Do not just show raw data. (11 pts)
 1. Graph(s) of population changes. Must include primary producers. One graph must show a producer and consumer. A minimum of two graphs is required.
 - d. **Discussion** (12 pts)
 - i. An in-depth discussion on one of the organisms you observed. Put everything *in your own words* with the proper citation in parentheses: **do not** quote directly from other works.
 - a) Include its scientific name.
 - b) Classification to its known level: Domain; Kingdom; Phylum; Class; Order; Family; Genus; Species
 - ii. Discuss the changes that occurred in your MicroAquarium over the past nine weeks. Note factors that might have influenced these changes.
 - iii. Compare your data with another group's data. What was their sample? _____ *OR*, What was the effect of an introduced species? Explain differences.
 - e. **Literature cited page.** Include resources used in identifying organisms and information sources for your background discussion. Include 6 references in correct format. You must use at least 3 journal articles; all references may *not* be books and websites. References must be cited somewhere in the content. Do not include references prior to 1980. In-text citations are noted with a number in parentheses corresponding to the number of the reference in your Literature Cited page. (6 pts)
3. **Three figures.**
 - a. Figures can include one photograph or picture, food chain, phylogenetic tree; calculations; or graph. A figure can have (no more than) two parts. Note, tables are not figures, (9)
 - b. Each figure must have a number and legend. E.g., *Figure YY. The population of Organism A decreased after Organism B...*
 - c. Refer to each figure in the body of the text. For example, *Organism A started growth on Day X after organisms B (Figure YY).* Then explain why in the discussion.
4. **General form: (5)**

<p><i>Attach this page to your report.</i></p> <p>Followed all directions explicitly with no exceptions.</p> <p>Typed, double spaced.</p>	<p>Presentation is neat and orderly throughout.</p> <p>Spelling and grammar are faultless.</p>
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Grade Structure for Term project.

1. Set-up and initial observations -4 pts
2. *Regular* log entries observations over nine weeks -4 pts each for a maximum of 36 pts
3. Written report -60 pts