SGI Biology Grading Rubrics

**Analyzing Data Components**- Student’s response accurately summarizes data, detects patterns and trends, and draws valid conclusion based on the data.

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| **Above and Beyond****Level 4** | Complete and Correct**Level 3** | **Almost there****Level 2** | **On your way** **Level 1** | **Level 0** |
| Student accomplishes a level 3 AND goes beyond in some significant way, such as:* Explaining unexpected results
* Judging the value of the investigation
* Suggesting additional relevant investigation
 | Student analyzes and interprets data correctly and completely AND draws a conclusion compatible with the analysis of the data. | Student notes patterns or trends, BUT does so incompletely. | Student attempts an interpretation, BUT ideas are illogical, OR ideas show a lack of understanding. | Student’s analysis or interpretation of data is missing, illegible, or irrelevant |

**Communication Skills Components**- Student’s response presents ideas clearly in the following format:

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| **Level 4** | **Level 3** | **Level 2** | **Level 1** | **Level 0** |
| Student accomplishes a level 3 AND goes beyond in some significant way, such as:Including additional images or diagrams effectively.* Using additional formats of communication effectively.
 | Student communicates ideas clearly with few or no technical errors. | Student may make several technical errors, BUT those errors do not prevent the audience from understanding the message. | Student’s communication is unclear, OR technical errors seriously distract the audience from understanding the message. | Student’s response is missing, illegible, or irrelevant. |

**Understanding Concepts** – Student’s response identifies and describes scientific concepts relevant to a particular problem or issue.

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| **Level 4** | **Level 3** | **Level 2** | **Level 1** | **Level 0** |
| Student accomplishes Level 3 and goes beyond in some significant way, such as:-providing relevant information not provided in class that enhances the response-using a diagram to clarify scientific concepts-relating the response to other scientific concepts | Student accurately and completely explains or applies relevant scientific concept(s). | Student explains or applies scientific concept(s) BUT omits some information OR includes some errors. | Student incorrectly explains or applies scientific concept(s)OR shows a lack of understanding of the concept(s). | Student’s response is missing, illegible, or irrelevant |

**Group Interaction** – Group members work as a team and the ideas of all members are valued and weighed in working toward the common goal

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| **Above and Beyond****Level 4** | Complete and Correct**Level 3** | **Almost there****Level 2** | **On your way** **Level 1** | **Level 0** |
| Group members accomplish Level 3 and go beyond in some significant way, such as:-asking helpful questions about each other’s ideas-helping each other accomplish the task-building on each other’s ideas | All group members participate and respectfully consider each other’s ideas. | Group Participation is unbalanced, OR group considers some members’, but not everyone’s, ideas with respect. | Participation is significantly unbalancedOR group totally disregarded some members’ comments and ideas. | Members do not work together,OR single individual does entire task. |

* **Evidence and Trade-Offs –** Student’s response applies evidence in comparing multiple options in order to make a choice.
 Student’s response states a position, supports it with evidence, and describes what advantages the chosen option gives up (trades off).

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| **Level 4** | **Level 3** | **Level 2** | **Level 1** | **Level 0** |
| Student accomplish Level 3 and go beyond in some significant way, such as:-including relevant evidence that was not studied in class-evaluating the source, quality, or quantity of evidence-proposing relevant experiments or research-including a diagram or other visual aid to clarify his/her ideas. | Student takes a position, supports the position with accurate and relevant evidence, AND describes the trade-offs of his/her position. | Student discusses one or more options using accurate and relevant evidence, and takes a position supported by the evidence, BUT reasoning is incomplete or part of evidence is missing. | Student takes a position BUT provides reasons that are subjective, inaccurate, or unscientific. | Student’s response is missing, illegible, or irrelevant. |

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|  | **Level 4** | **Level 3** | **Level 2** | **Level 1** | **0** |
| **Group:** |  |  |  |  |  |
| Analyzing Data |  |  |  |  |  |
| Communication Skills |  |  |  |  |  |
| Understanding Concepts |  |  |  |  |  |
| Group Interaction |  |  |  |  |  |
| Evidence and Trade-offs |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Level 4** | **Level 3** | **Level 2** | **Level 1** | **0** |
| **Group:** |  |  |  |  |  |
| Analyzing Data |  |  |  |  |  |
| Communication Skills |  |  |  |  |  |
| Understanding Concepts |  |  |  |  |  |
| Group Interaction |  |  |  |  |  |
| Evidence and Trade-offs |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Level 4** | **Level 3** | **Level 2** | **Level 1** | **0** |
| **Group:** |  |  |  |  |  |
| Analyzing Data |  |  |  |  |  |
| Communication Skills |  |  |  |  |  |
| Understanding Concepts |  |  |  |  |  |
| Group Interaction |  |  |  |  |  |
| Evidence and Trade-offs |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- |
|  | **Level 4** | **Level 3** | **Level 2** | **Level 1** | **0** |
| **Group:** |  |  |  |  |  |
| Analyzing Data |  |  |  |  |  |
| Communication Skills |  |  |  |  |  |
| Understanding Concepts |  |  |  |  |  |
| Group Interaction |  |  |  |  |  |
| Evidence and Trade-offs |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |