

## B2. Laboratory Science Higher Order Learning Goals (HOLGS)

Students will...

1. Demonstrate literacy in the content and principles of a scientific discipline.
2. Conduct laboratory or field procedures that explore content, principles and application of scientific disciplines in a socially responsible manner.

| <b>B2 (Laboratory Science) HOLG Rubric</b>                       |   |  |   |   |
|--|---|--|---|---|
| <b>Criteria</b>  | <b>Performance Standards</b>  |  |   |   |
|  | <b>Exceeds Expectations<br/>(4)</b>   | <b>Meets Expectations<br/>(3)</b>              | <b>Needs Improvement<br/>(2)</b>                          | <b>Below Expectations<br/>(1)</b>                                     |
| Explains scientific concepts and principles.                     | Accurately explains scientific concepts while demonstrating understanding and insight (e.g. depth of analysis, cleverness, originality, thoroughness).      | Accurately explains scientific concepts.       | Explains scientific concepts with limited accuracy.       | Did not explain scientific concepts, or makes excessive errors.       |
| Conducts an investigative analysis using scientific methodology. | Accurately conduct an investigative analysis while demonstrating understanding and insight (e.g. depth of analysis, cleverness, originality, thoroughness). | Accurately conducts an investigative analysis. | Conducts an investigative analysis with limited accuracy. | Did not conduct an investigative analysis, or makes excessive errors. |

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|--|---|--|--|---|
| Applies content to self or the world, considering multiple perspectives (e.g., comparative, historical, methodological) and why they matter. | Applies content to self or the world, considering multiple perspectives and why they matter with exceptional insight (e.g. depth of analysis, astuteness, originality). | Applies content to self or the world, considering multiple perspectives and why they matter with acceptable insight. | Applies content to self and the world, considering multiple perspectives and why they matter with limited insight. | Did not apply content to self and the world, considering multiple perspectives and why they matter. |
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*Developed by CAWG Committee - October, 2016. Approved by CAC - December 2016. Edited - March, 2017.*

## **B2. Laboratory Science Core Learning Outcomes (CLOs)**

Students will:

1. Demonstrate understanding of and literacy in the content and principles of a scientific discipline. **(Criteria 1)**
2. Perform laboratory or field procedures and that explore the content and principles of these disciplines. **(Criteria 2)**
3. Carry out scientific procedures in a socially responsible manner. **(Criteria 3)**
4. Accurately observe, record, analyze, and report data collected in the scientific laboratory or the field. **(Criteria 2)**