Project Coordinator and Evaluation Panel Guide

***Achieving Classroom Excellence Act* (ACE)**
End of Course Project
Biology I
Probing Pond Life

Project Overview
The project is composed of three components. The student will complete all three components and tasks associated with each:

- Component 1: Create a hay infusion to investigate pond organisms.
- Component 2: Design, conduct, and evaluate an experiment to test the effects of environmental factors on organisms within a pond ecosystem
- Component 3: Complete the Student Learning Reflection as described in the Project Guide.

Role of the Project Coordinator

The Project Coordinator is an important part of the End of Course Project process. The Project Coordinator's role is to make sure the student understands the scope of the project, manage the paperwork, review a student's progress toward completion of the project at the indicated CHECK POINTS, and adjust the student's completion timeline if necessary.

In the case of a student with an Individualized Education Program (IEP) or an English Language Learner (ELL) plan, the Project Coordinator should consult the student's records and resource personnel to ensure that all appropriate accommodations allowed on the Oklahoma Core Curriculum Tests (OCCT) are provided on the End of Course Project.

Once the student has completed the project, the Project Coordinator will prepare the paperwork necessary to submit the project to the Project Evaluation Panel. To the extent possible, it is recommended that the Project Coordinator serve only as a facilitator of the evaluation process rather than as an active participant of the Project Evaluation Panel.

Directions for the Project Coordinator

1. Read the Biology I: Probing Pond Life Student Guide.
2. With the student, determine a timeline for completing the project and enter target dates for completing each of the CHECK POINTS in the space provided.
3. Assist the student in determining an appropriate format to represent their work. Portions of this project must be presented in a video format, or recorded electronically. Read the Representation of Work section for more information.
4. Check in with the student at the CHECK POINTS listed in the project to ensure that the student is making appropriate progress toward completion. Adjust the timeline if necessary.
5. Arrange a time for the student to complete the Student Learning Reflection as described in the project. This reflection must be completed in your presence or in the presence of another certified educator. This reflection will follow the same guidelines for Representation of Work as all other components of the project.
6. Submit the final project, including the Student Learning Reflection, to the Project Evaluation Panel for scoring. Attach the Project Submission Form.
7. After the Project Evaluation Panel has reviewed the project, ensure that the project and the panel's recommendation are forwarded to the District Superintendent.
8. Ensure that the District Superintendent submits the final project determination to the Oklahoma State Department of Education and communicates the final project determination to the student.

Representation of Work

Representation of work may come in a variety of forms, including multi-media presentations, constructed objects, artistic expression, written documents, and verbal expression. Creativity is encouraged!

All student work must be documented for scoring by the Project Evaluation Panel and kept on file for at least five years after completion. If a student completes any components of the project in a form other than written documents, these components may need to be documented through electronic files, video recordings, audio recordings, or other documentation method for accurate scoring and efficient storage. The Project Coordinator may assist the student with this documentation process by photographing, recording, or otherwise making digital copies of student work. The Project Coordinator may not assist in completion of the student work.

Role of the Project Evaluation Panel

The Project Evaluation Panel is an important part of the End of Course Project process. The Project Evaluation Panel's role is to provide a recommendation to the District Superintendent regarding the overall performance of the student on the project. The Panel will make this recommendation without bias, adhering to the procedures and guidelines set by the Oklahoma State Board of Education, and using the scoring criteria and Performance Level Rubric included in this guide.

The Panel must consist of at least three certified educators. The Panel must include at least one teacher who is highly qualified in the content area of the project. To the extent possible, it is recommended that all panel members be highly qualified in the content area of the project. It is also recommended that the Panel include at least one educator who does not currently have the student in class and at least one administrator. Schools and districts are encouraged to work collaboratively with other schools and districts to develop Project Evaluation Panels that include qualified individuals who can provide a fair assessment of student mastery of content.

Directions for the Project Evaluation Panel

1. Read the Biology: Probing Pond Life Sample Student Guide.
2. Become familiar with the Biology I Performance Level Rubric (Appendix D).
3. Follow all directions and scoring criteria (Appendix B, C, D, and E) included in this guide.
4. Submit a recommendation to the District Superintendent on the overall performance of the student on the project. Use the Review Panel Recommendations Form.

General Scoring Criteria

This project will be evaluated on the student's demonstration of mastery of the state academic content standards. A final recommendation of the student's performance level will be made to the District Superintendent based on the **Biology I Performance Level Rubric** (Appendix D).

Scoring Considerations

- Representation of work may come in a variety of forms, including multi-media presentations, constructed objects, artistic expression, written documents, and verbal expression. Creativity is encouraged! Work that is not submitted in written form should be documented or recorded and provided to the Panel for accurate scoring.
- Due to the nature of this in-depth, sequential project, it is very possible that a student will make computational errors and/or display misconceptions of content in early steps that will impact the student's work in subsequent steps. In order to keep from penalizing a student multiple times throughout the steps of the project, it is important for the student's errors to be taken into consideration throughout the scoring process.
- Use of technology for project completion is acceptable and is required in some components of the project. At any point that a student uses technology to assist in calculations or product creation, the student must be able to explain the inputs and justify the outputs as required by the Project Scoring Rubric.

Scoring Directions

1. Download and use the **Biology I: Probing Pond Water Electronic Appendices**.
2. Score each component of the student project using the Scoring Criteria provided in the **Project Scoring Rubric**s (Appendix B).
   - Component I: *Hay Infusion Investigation* will be evaluated using the Component I Scoring Rubric
   - Component II: *Probing Pond Life Experiment* will be evaluated using the Component II Rubric
   - Component III: *Student Learning Reflection* will be evaluated using the Component III Rubric

3. The **Probing Pond Water Electronic Appendices** is linked to transfer the assigned points for each task to the appropriate corresponding cell of the **Total Scoring Table (***Appendix C*). For example, Component I, task 1c, assesses process standard 1 and is linked to the corresponding cell in the Total Scoring Table.

   - If a task is associated with two or more different standards, for example, process standard 1 and process standard 4, the score will be added into each field.
   - The scoring table sums the points awarded by Task, Component, and Standard.

4. Use the **Total Scoring Table, Total by Standard column**, to determine how to rate the student's total points earned on the project for each row of the **Biology I Performance Level Rubric (***Appendix D***)**

- Total the points earned on the Biology I Performance Level Rubric.

5. Using the **Performance Level Correlation Table** (*Appendix E)* compare the total points earned on the Biology I Performance Level Rubric and the Total Scoring Table to determine the recommendation for the Student's Performance Level score on the Biology I End of Course Project.

Biology I: Probing Pond Life
Performance Level Correlation Table

Proficiency Level	***Total Scoring Table*** *Appendix C*	***Performance Level Rubric*** *Appendix D*
Advanced	Total points are **equal to or greater than 76**, with no scores equal to zero.	Total points are **equal to or greater than 34**, with no scores equal to one.
Proficient	Total points are within the **75-55 range**, with no scores equal to zero.	Total points are within the **24 – 33 range,** with no **scores equal to one.**
Limited Knowledge	Total points are within the **54-40 range.**	Total points are within the **18-23 range**.
Unsatisfactory	Total points are **equal to or less than 39**.	Total points **are equal to or less than 17.**

- An overall score **equal to or less than 17** on the Biology I Performance Level Rubric is required for the student to score **Unsatisfactory** on the Biology I End of Course Project.

- An overall score of **18-23** on the Biology I Performance Level Rubric is required for the student to score **Limited Knowledge** on a Biology I End of Course Project.

- An overall score of **24-33** on the Biology I Performance Level Rubric is required for the student to score **Proficient** on a Biology I End of Course Project.

- An overall score **equal to or greater than 34** with no scores equal to one on the Biology I Performance Level Rubric is required for the student to score **Advanced** on a Biology I End of Course Project.

6. Based on the information in #4 above, make a recommendation to the District Superintendent for the Performance Level score of the student on the Biology I End of Course Project.

Oklahoma State Department of Education
ACE Biology I End of Course Project
Safety Assurance

Directions: The student is required to visit the Web sites on the resource list to identify potential safety hazards associated with this ACE Biology I End of Course Project. The student will determine the appropriate Personal Protective Equipment (PPE) and safety protocols necessary to complete this project.

Identifying safety concerns and determining the appropriate PPE and safety protocols are important components of any scientific research activity. Common risks encountered as students conduct scientific research include: 1) cuts from broken glassware, 2) burns from hot plates or burners, 3) electric shock, 4) eye injuries, 5) fires, and 6) chemical spills. Identification of hazards and implementation of protocols to safeguard the student are the responsibilities of the student and project coordinator.

Resource List:

Flinn Scientific: http://www.flinnsci.com/Documents/miscPDFs/Safety_Contract.pdf

Flinn Scientific (MSDS): http://www.flinnsci.com/search_MSDS.asp
Science and Safety: http://www.csss-science.org/safety.shtml
Laboratory Safety Links: http://carnegiescience.edu/first_light_case/horn/labsafety.html
Safety in the Science Classroom:
http://www.nsta.org/pdfs/SafetyInTheScienceClassroom.pdf
Be Protected for a Safer Science Experience: Be Prepared!:
http://www.nsela.org/index.php?option=com_content&view=article&id=123:be-protected-for-a-safer-science-experience-be-prepared-&catid=71:sciencesafety&itemid=79

After you have reviewed the information in the documents on the resource list complete the chart. List the potential hazards associated with each component of the ACE Biology I End of Course Project and the specific PPE or safety protocols you have used as safeguards. If the component of the project does not pose a hazard write "not applicable" in the protocol section for that project component. This document must be reviewed and signed by your parent(s)/guardian and project coordinator **before** you begin the ACE Biology I End of Course Project. **This document must be reviewed and amended as needed prior to beginning Component II of the experimental design.**

Example is given in italics

Component	Potential Safety Hazard	PPE or Safety Protocol
Use of the microscope	*Electrical shock*	*Caution must be taken so that the cord is on the table, is not frayed, and does not run across a water source.*

I have reviewed the information found in the resource list above and discussed the potential safety hazards, PPE, and safety protocols described above with my project coordinator. I agree to follow all of the recommendations described above as I conduct my ACE Biology I End of Course Project.

Student
Signature:_____

I have reviewed information found on the ACE Biology I End of Course Project Safety Assurance with my student. I am aware of the potential hazards, appropriate PPE, and safety protocols associated with this project.

Parent/Guardian
Signature:
_____

I have reviewed the information found in the resource list above and discussed the potential safety hazards, PPE, and safety protocols described above with the student. I have demonstrated the appropriate use of any required PPE and modeled appropriate safety protocols for the student. As the project coordinator, I assume all safety responsibilities associated with the ACE Biology I End of Course Project.

Project Coordinator
Signature:
_____

This form must be included in the ACE Biology I End of Course Project

Biology I: Probing Pond Life

COMPONENT I SCORING RUBRIC

PROJECT STEP	STANDARD COMPONENT	SCORING CRITERIA
Video and Notebook/log of Hay Infusion		
1a. Select three samples from different areas of the hay infusion. Describe and defend your sampling technique.	Process Standards 1, 3, 4	0 – No description or defense of sampling technique 1 – Gives limited description and meager defense of sampling technique 2 – Gives complete description and thorough defense of sampling technique
1b. Properly prepare wet-mount slides for each sample.	Process Standards 1, 3	0 – Does not use a coverslip, or safety procedures are not followed 1 – Correctly uses a coverslip on slide and safety procedures are followed
1c. Demonstrate your ability to properly use a microscope to locate specimen(s) in your hay infusion using various objective lenses.	Process Standard 1	0 – Does not know how to use a microscope, or safety procedures are not followed 1 – Cannot locate organisms without assistance and safety procedures are followed 2 – Exhibits appropriate microscope skills and needs no assistance and safety procedures are followed
1d. Observe, describe, draw, and give approximate number of each type of organism present within the five different locations into each of the samples.	Process Standards 1, 2, 4	0 – Organisms are not described, counted, or drawn 1 – Organisms are poorly described and drawn and counted for a single location 2 – Organisms are carefully described, drawn, and counted for multiple locations within the samples
1e. Classify each organism and record name on drawing. (Student may assign descriptive name if unable to classify)	Process Standard 2 Content Standard 3	0 – Organisms are not classified or named 1 – Mostly descriptive names given to classify organisms 2 – Organisms are classified and appropriately named

PROJECT STEP	STANDARD COMPONENT	SCORING CRITERIA
Questions From Hay Infusion		
1f. Identify, describe and defend three unique pieces of evidence from your investigation which support this statement.	Content Standards 1, 5	0 – Cites no evidence 1 – Identify and describe but do not defend evidence 2 – Identify, describe and defend three pieces of evidence
1g. Identify at least two cellular activities and the structures involved in those processes which may be occurring in this investigation.	Content Standards 1, 5	0 – Does not identify any cellular processes or structures 1 – Identifies 1 cellular process and one structure correctly 2 – Identifies 2 cellular processes and structures correctly
1h. Name at least four characteristics that aided you in your classification of these organisms, and list which are plant-like and which are animal-like.	Content Standard 3	0 – Does not name any characteristics 1 – Names 1 - 3 characteristics 2 – Names 4 characteristics
1i. Compare and contrast the number and types of organisms observed in **Samples 1**, **2**, and **3**.	Process Standard 1, 2	0 – Does not describe differences 1 – Describes at least 1 difference 2 – Describes 2 or more differences
1j. Draw a simple food web using the organisms in your sample and explain the role of each organism.	Content Standards 4, 5 Process Standard 5	0 – Does not draw or explain food web 1 – Draws but does not explain food web correctly 2 – Draws and explains food web
1k. What factors would be necessary to add or maintain this investigation over an extended period of time?	Content Standards 1, 2, 5	0 – Does not identify any factors 1 – Describes at least 2 factors 2 – Describes at least 3 factors
1l. After examining the simulated DNA gel explain how you determined the two most closely related species.	Content Standard 2 Process Standard 4, 5	0 – Is unable to explain which 2 species are more closely related 1 – Gives limited explanation of species relationship 2 – Fully explains how the gel depicts the species relationship

COMPONENT II SCORING RUBRIC

PROJECT STEP	STANDARD COMPONENT	SCORING CRITERIA
Experimental Design: Poster Presentation or Digital Media and Notebook/log		
2a. Describe the design of an experiment with control setup and provide a rationale to test the effect of an environmental factor and how it impacts a pond ecosystem.	Process Standard 3	0 – Does not provide an experimental design 1 – Experimental design is incomplete 2 – Fully describes an appropriate design with control setup with a rationale
2b. Develop a testable hypothesis.	Process Standard 3	0 – No hypothesis is given 1 – Hypothesis is incomplete 2 – Hypothesis is testable and contains both independent and dependent variables
2c. Select quantifiable data and appropriate units.	Process Standard 1	0 – Does not quantify data or misuses SI units 1 – Data is partially quantified and some units are correctly identified 2 – All data is quantified and units are appropriately applied
2d. Prepare a complete list of materials needed to conduct your experiment.	Process Standard 3	0 – List is partial or incomplete 1 – List is complete with appropriate quantities 2 - List is complete with appropriate quantities and sizes indicated
2e. Design and document detailed lab procedures and safety precautions in your notebook/log.	Process Standard 3	0 – Procedural directions are incomplete or missing steps 1 – Procedural directions are complete, yet are given in the wrong order. 2 – Procedural directions are ordered correctly, complete, and described in such a manner the experiment can be reproduced.
2f. Conduct the designed experiment.	Process Standards 3	0 – Student does not provide evidence or artifact of conducted experiment. 1 – Procedure is not ordered/followed correctly. 2 – Most measurements or observations are given. 3 – All critical steps are listed, yet

		may be out of sequence. Not all measurements are labeled. Observations are not detailed. 4 – Complete step by step account of what student did, or every step that was taken is documented. All measurements are given and labeled. Observations are listed and detailed.
2g. Collect and record quantitative and qualitative data from the designed experiment. Prepare a data table and graph depicting results.	Process Standards 1, 4, 5	0 – No quantitative or qualitative data collected. 1 – Quantitative or qualitative data collected or represented appropriately 2 – Quantitative or qualitative data collected and represented appropriately 3 – Quantitative and qualitative data collected and represented appropriately
2h. Analyze data to describe trends revealed by data.	Process Standards 4, 5	0 – No trends are stated, and calculations, if needed, are not given. 1 – Trends in data table or graph are correctly described. If appropriate, mathematical relationships are not identified and calculations are not shown. Error analysis is not discussed. 2 – Trends in data table or graph are incorrectly or incompletely described. If appropriate, mathematical relationships are identified but no calculations shown. Error analysis is discussed. 3 – All trends in data table and graph are correctly described. If appropriate, mathematical relationships are identified and calculations shown. Error analysis is discussed.
2i. Evaluate experimental data to draw the most logical conclusion that is best supported by the evidence. Use analyzed data to confirm,	Process Standard 4 Content Standard 4	0 – No evaluation of experimental data, nor analysis of data to confirm, revise or reject stated hypothesis. 1 – Experimental data was evaluated to draw the most logical conclusion

revise, or reject hypothesis. Analysis is extended to prediction(s), follow-up question(s), or real world application(s).		or analyzed data was used to confirm or reject hypothesis. 2 – Experimental data was evaluated to draw the most logical conclusion best supported by the evidence and analyzed data to confirm, revised, or reject hypothesis or no extension is made. 3 – Experimental data was evaluated to draw the most logical conclusion best supported by the evidence, analyzed data to confirm or reject hypothesis, and at least one extension is made.
2j. Cite all references used.	Process Standard 4	0 – No references or an insufficient number of references are cited 1 – Evidence of prior research present but missing critical sources. 2 – Evidence of prior research specific to the purpose of the experiment has been conducted, yet the documentation of sources is incomplete or vague. 3 – Evidence of prior research specific to the purpose of the experiment has been conducted. A sufficient number of references are cited, and documentation of sources is complete.

COMPONENT III SCORING RUBRIC

PROJECT STEP	STANDARD COMPONENT	SCORING CRITERIA
Student Reflection		
3a. Using a method of your choice explain how this project has contributed to your learning and ability to apply Biology I skills to the real world.	Process Standard 4 Content Standards 3, 4	0 – No explanation given 1 – Logical explanation given 2 – In-depth explanation given
3b. If someone repeated your experiment, would you expect them to get similar or different results? Justify your answer.	Process Standards 3	0 – No justification given 1 – Logical justification provided 2 – In-depth justification provided

Total Scoring Table

Using the Component Rubric Criteria, there are a total of 101 possible points.

Points from the Component Rubrics Criteria (*Appendix B*) will be transferred to the Total Scoring Table (*Appendix C) through use of an electronically linked system.* The electronic table will tally the total points earned on the project by tasks, component, and standard.

The electronic version of the total scoring table has a similar format to the one below.

	Total Points from Criteria Scoring				
	Component I		**Component II**	**Component III**	**Total Points by Standard****
Standard	*Video**	*Questions**	*Experimental Design**	*Student Reflection**	
P 1.0	4(5)	1(2)	2(6)	-	(13)
P2.0	2(4)	1(2)	-	-	(6)
P 3.0	2(3)	-	5(12)	1(2)	(17)
P.4.0	2(4)	1(2)	4(13)	1(2)	(21)
P 5.0	-	2(4)	2(7)	-	(11)
C 1.0	-	3(6)	-	-	(6)
C 2.0	-	2(4)	-	-	(4)
C 3.0	1(2)	1(2)	-	1(4)	(8)
C 4.0	-	1(2)	1(3)	1(2)	(7)
C 5.0	-	5(8)	-	-	(8)
Grand Total	11(18)	17(32)	14(43)	4(10)	(101)

* The first number in each cell represents the number of times a standard is correlated to a task or question in the rubric. The number in parentheses represents the maximum number of points possible for that standard by component.
** Scores which will be used by the Evaluation Panel to determine the student's final performance level.

Appendix D

ACE End of Course Projects
Performance Level Rubric
Biology I

	1	2	3	4
Process Standard 1. Observe and Measure - Observing is the first action taken by the learner to acquire new information about an organism or event. Opportunities for observation are developed through the use of a variety of scientific tools, allowing the student to distinguish between observation and inference. Measurement allows observations to be quantified.	Student demonstrates little to no mastery of the process standards.	Student demonstrates partial mastery of the process standards.	Student demonstrates mastery of the process standards including such skills as identify qualitative and quantitative changes, use appropriate tools, and use appropriate International System of Units.	Student demonstrates a superior and in-depth mastery of the process standards.
Process Standard 2: Classify - Classifying establishes order. Organisms and events are classified based on similarities, differences, and interrelationships.	Student demonstrates little to no mastery of the standard.	Student demonstrates partial mastery of the standard.	Student demonstrates mastery of the standard including such skills as use observable properties to make biological classifications and identify properties by which a classification system is based.	Student demonstrates a superior and in-depth mastery of the standard.
Process Standard 3: Experimental Design – Understanding experimental design requires that students recognize the components of a valid experiment.	Student demonstrates little to no mastery of the standard.	Student demonstrates partial mastery of the standard.	Student demonstrates mastery of the standard including such skills as evaluate the design of a biology laboratory experiment, identify experimental variables, use mathematics, identify possible hypotheses, and recognize hazards.	Student demonstrates a superior and in-depth mastery of the standard.

Appendix D

	1	2	3	4
Process Standard 4: Interpret and Communicate - Interpreting is the process of recognizing patterns in collected data by making inferences, predictions, or conclusions. Communicating is the process of describing, recording, and reporting experimental procedures and results to others. Communication may be oral, written, or mathematical and includes organizing ideas, using appropriate vocabulary, graphs, other visual representations, and mathematical equations.	Student demonstrates little to no mastery of the standard.	Student demonstrates partial mastery of the standard.	Student demonstrates mastery of the standard including such skills as make predictions, interpret data, determine if results support hypotheses, draw conclusions, and create graphs and charts.	Student demonstrates a superior and in-depth mastery of the standard.
Process Standard 5: Model - Modeling is the active process of forming a mental or physical representation from data, patterns, or relationships to facilitate understanding and enhance prediction.	Student demonstrates little to no mastery of the standard.	Student demonstrates partial mastery of the standard.	Student demonstrates mastery of the standard including such skills as interpret biological models and select predictions based on models.	Student demonstrates a superior and in-depth mastery of the standard.
Content Standard 1: The Cell - Cells are the fundamental unit of life, composed of a variety of structures that perform functions necessary to maintain life.	Student demonstrates little to no mastery of the standard.	Student demonstrates partial mastery of the standard.	Student demonstrates mastery of the standard including such skills as identify cell structures, organization, and functions.	Student demonstrates a superior and in-depth mastery of the standard.
Content Standard 2: The Molecular Basis of Heredity - DNA determines the characteristics of organisms.	Student demonstrates little to no mastery of the standard.	Student demonstrates partial mastery of the standard.	Student demonstrates mastery of the standard including such skills as understand the cell cycle, replication, transcription, mitosis, and gene recombination.	Student demonstrates a superior and in-depth mastery of the standard.

Appendix D

	1	2	3	4
Content Standard 3: Biological Diversity - Diversity of species is developed through gradual processes over many generations.	Student demonstrates little to no mastery of the standard.	Student demonstrates partial mastery of the standard.	Student demonstrates mastery of the standard including such skills as identify evidence of common ancestry related to biological diversity and adaptations.	Student demonstrates a superior and in-depth mastery of the standard.
Content Standard 4: The Interdependence of Organisms - Interdependence of organisms in an environment includes the interrelationships and interactions between and among organisms.	Student demonstrates little to no mastery of the standard.	Student demonstrates partial mastery of the standard.	Student demonstrates mastery of the standard including such skills as understand organism and species interaction in an ecosystem and explain population dynamics.	Student demonstrates a superior and in-depth mastery of the standard.
Content Standard 5: Matter, Energy, and Organization in Living Systems - Living systems require a continuous input of energy to maintain their chemical and physical organizations.	Student demonstrates little to no mastery of the standard.	Student demonstrates partial mastery of the standard.	Student demonstrates mastery of the standard including such skills as identify the basic processes within photosynthesis and respiration.	Student demonstrates a superior and in-depth mastery of the standard.
Student Learning Reflection	Student demonstrates less than a Limited Knowledge level of understanding how this project has contributed to the student's learning and real world application of Biology I skills.	Student demonstrates a partial understanding how this project has contributed to the student's learning and real world application of Biology I skills.	Student demonstrates understanding of how this project has contributed to the student's learning and real world application of Biology I skills.	Student demonstrates superior understanding of how this project has contributed to the student's learning and real world application of Biology I skills, including past and future benefits of this experience on the student's life.

APPENDIX E

Biology I: Probing Pond Life
Performance Level Correlation Table

Proficiency Level	**Total Scoring Table** *Appendix C*	**Performance Level Rubric** *Appendix D*
Advanced	Total points are **equal to or greater than 79**, with no scores equal to zero.	Total points are **equal to or greater than 34**, with no scores equal to one.
Proficient	Total points are within the **57 – 78 range**, with no scores equal to zero.	Total points are within the **24 – 33 range,** with no scores equal to one.
Limited Knowledge	Total points are within the **41 – 56 range.**	Total points are within the **18-23 range**.
Unsatisfactory	Total points are **equal to or less than 40**.	Total points **are equal to or less than 17.**

- An overall score **equal to or less than 17** on the Biology I Performance Level Rubric is required for the student to score Unsatisfactory on the Biology I End of Course Project.
- An overall score **within the 18 – 23 range** on the Biology I Performance Level Rubric is required for the student to score Limited Knowledge on a Biology I End of Course Project.
- An overall score **within the 24 – 33 range** on the Biology I Performance Level Rubric is required for the student to score Proficient on a Biology I End of Course Project.
- An overall score **equal to or greater than 34** with **no scores equal to one** on the Biology I Performance Level rubric is required for the student to score Advanced on a Biology I end of Course Project.