

## Lab Notebook Scoring Rubric for Nucleic Acids Biochemistry Lab

Date:	Evaluator:					
Student:						
Objective	Novice	Apprentice	Exemplary			
<i>Organization:</i> organize lab notes effectively	—	Pages not numbered or dated	—	Most pages are numbered and dated	—	All pages numbered and every section is dated
	—	No Titles or Headings	—	Titles and Headings are clearly marked in most experiments	—	Each experiment has a Title, Goal, Method, Result, and Conclusion
	—	Table of contents is missing	—	Table of contents is mostly up-to-date and complete	—	Table of contents lists Date, Experiment Title, and Page numbers for each experiment
<i>Content:</i> Describe materials and methods used and document results	—	Methods are incompletely described	—	Methods and Materials are described in most experiments	—	One could repeat the experiment from the Methods described
	—	Results are not included	—	Most Figures and Tables are included	—	All Figures and Tables are included accompanied by titles and legends
	—	Observations are not recorded	—	Observations are noted	—	Observations are carefully recorded
<i>Analysis:</i> Describe data analysis	—	Data analysis is not described or included	—	Data is analyzed, but the methods used may not be fully described	—	Data analysis is complete with sample calculations written out in full
	—	No error analysis	—	Error analysis is qualitative	—	Final results are accompanied by error estimates
<i>Interpretation</i> Reach a conclusion	—	Conclusions are not documented	—	Immediate thoughts are recorded for most experiments	—	Results are interpreted in the context of the hypothesis being tested

**Lab Report Scoring Rubric for Nucleic Acids Biochemistry Lab**

Date:					Experiment:		
Team:					Evaluator:		
Objective	Needs improvement		Satisfactory		Excellent		
<i>Writing:</i> Demonstrate effective technical writing	___	Poor spelling	___	Most words are spelled correctly	___	Text is error-free	
	___	Tense is inconsistent	___	Tense is mostly consistent	___	Observations and experimental sections are related in the past tense; conclusions are related in the present tense	
	___	Voice jumps between first, second, and third person	___	Voice is mostly consistent	___	First person pronouns are used only for special emphasis	
	___	Text is difficult to read	___	Writing is mostly clear and concise	___	Text is clear, concise, and easy to read	
<i>Introduction:</i> Identify the testable hypotheses	___	Hypothesis is missing from the introduction or an untestable/irrelevant hypothesis is misidentified	___	A testable hypothesis is identified	___	Testable hypothes(es) are stated in clear and compelling text	
<i>Experiment:</i> Describe materials and methods used and document results	___	Methods are incompletely described or too much detail is included	___	Completeness and efficiency are balanced to some degree in the Methods section	___	Method description achieves an appropriate balance between completeness and efficiency	
	___	Results are not included or Figures and Tables are confusing	___	Figures and Tables are clear and effective	___	Figures and Tables are effective and accompanied by titles and legends	
<i>Analysis:</i> Describe data analysis	___	Data analysis is not described or included	___	Data is analyzed, but the methods used may not be fully described	___	Data analysis is complete and could be reproduced by someone	

					familiar with the experiment	
	—	No error analysis or an inappropriate emphasis on error analysis	—	Qualitative error analysis is included where appropriate	—	Final results are accompanied by error estimates where appropriate
<i>Discussion</i> Interpret the results and reach a conclusion	—	Conclusions are missing or may be stated without any supportive arguments	—	A conclusion is reached but the reader is may not be completely persuaded	—	Results are interpreted in the context of the hypothesis being tested and a persuasive conclusion is achieved